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The art program is based on findings that children learn best by experimenting with materials and gain the confidence to think, feel, and express themselves when they are given time to work at their own pace, within their current developmental stage. Some children pass rapidly from stage to stage while others have periods of little or no apparent progress. Each art activity is described in terms of the stages of development. Stage one does not correspond to grade one. Similarly, a child who is in an advanced stage in one art area may not be equally advanced in another. Stage descriptions highlight specific advances in ability and are presented in terms of what the child does. His learnings and activities at each level are cumulative and represent combined emotional, mental, manual, and aesthetic growth. Activities are presented in terms of: materials and their uses, classroom management, teaching procedures, and suggested experiences. Photographs and childrens' art works augment the presentation of these ideas and methods.

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Board of Education, City of New York

Art in the Elementary Schools

A MANUAL FOR TEACHERS

Curriculum Bulletin Number Eight

1963-1964 Series

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Foreword

For all children the process of growing through art is a happy one. Art learning is a highly personal matter. It represents a fusion of early life experiences with the inner forces that compose the child's unique personality.

Art education is essential to the personal growth and development of every child. Opportunities for creative activities provide him with a natural and rewarding means of self-expression. The creative process involves the child in the selection of self-set goals, in the emotional and thought processes that determine how the goals are to be reached, and finally, in an evaluation of the aesthetic and personal qualities that have been achieved.

Early awareness of art—stimulated by personal involvement with aesthetic elements of line, form, color, and texture—engenders appreciation. It forms a natural foundation for sensitivity to, and appreciation of, manifold forms of creativity.

Joseph O. Loretan

Acknowledgments

The original edition of *Art in the Elementary Schools* was published in 1952 (Curriculum Bulletin Number 2, 1951-1952 series). This manual, a pioneer in creative art education, established the philosophy, content, and practices of the art program in our elementary schools. Based on extensive experimentation and research, the original manual served as a valuable guide to the classroom teacher.

Since its initial publication, *Art in the Elementary Schools* has been studied, discussed, and reviewed by the staff of the Bureau of Art. Conclusions indicated that the philosophy of creative art education, as presented in the original publication, still stands as expressive of the solid foundations on which art education in our schools today is still based.

Extensions of certain areas, however, appeared desirable in the light of children's interests and capacities. Experimentation with children in different classroom situations and varying class levels, resulted in the expansion of the chapters "Modeling with Clay" and "Constructing with Wood and Other Materials" to provide additional creative experiences in these fields.

A review of the organization of the manual resulted in a more concise presentation of all of its areas.

Certain sections, such as *Broadening Appreciation* and *Art and Other Curriculum Areas,* that are concerned with over-all aspects of the art program have been placed in the "Introduction" and have been developed in greater detail. Other topics have been added.

Art in the Elementary Schools was planned and written under the direction of Olive L. Riley, Director of Art. Marian Dock and Shirley Hochman were responsible for writing the major revisions. They were assisted by the following art supervisors:

> *Marjorie Doe, Andrew Donaldson, Frances Gessner, Irwin Gross, Rita Hogan, Lillian Kennedy, Charlotte Kughler, Nora Lee, Beatrice Matthews, Irene McAveney, Dominic Munafo, Julius Nesse, Melvin Reiss, Mildred Royal, Jennie Smith.*

Ann Koonman assisted the Director in editorial revisions.

William H. Bristow, Assistant Superintendent, Bureau of Curriculum Research, followed the process of revision from its initial stages. Maurice Basseches, Editor, collaborated in the initial planning. The format of the manual was designed by Irwin Dermer who was also responsible for handling production.

Ambrose J. Hickey, Staff Photographer for the Board of Education, whose photography enhances and clarifies the publication, is responsible for most of the photographs. Others are the work of Irwin Dermer; Chet Ross Studio; Art Kane; Ira N. Toff; and Paul Studios, Inc.

Elizabeth F. Ring gave efficient, willing service in typing material in manuscript form.

Contents

1 INTRODUCTION: THE ART PROGRAM

2 Art as Self-realization
2 Values
4 Scope
4 Broadening Appreciation
6 Teacher's Role
6 Planning
8 The Structure of a Lesson
9 The Special Art Teacher
9 Classroom Management
10 Functions of Display
11 Planning a Display
12 Art and Other Curriculum Areas
13 Art and Social Studies
15 Art and Mathematics
15 Art and Language Arts
18 Art and Science
19 Art and Music
20 Using this Manual

21 CHAPTER ONE: PAINTING

22 Materials for Painting in the Classroom
23 Materials for Painting in the Art Room
24 Classroom Management
26 Classroom Management in the Art Room
26 Teaching Procedures
27 Motivation
27 Guidance
29 Evaluation
30 Finding Evidences of Growth
31 Suggested Experiences
31 Grades K — 2
35 Finger Painting
37 Grades 3 — 4
39 Grades 5 — 6
40 Discovery
40 Story-Telling Painting

43 CHAPTER TWO: DRAWING

44 Materials
44 Classroom Management
45 Teaching Procedures
45   Motivation
45   Guidance
46   Evaluation
47   Finding Evidences of Growth
48 Suggested Experiences
48   Grades K — 2
50   Grades 3 — 4
54   Grades 5 — 6

59 CHAPTER THREE: MODELING WITH CLAY

60 Materials and Equipment
61 Glazes
63 Classroom Management
64 Restoring Clay
65 Teaching Procedures
66 Suggested Experiences
66   Grades K — 2
68   Grades 3 — 4
69   Designing with Slabs of Clay
71   Grades 5 — 6

75 CHAPTER FOUR: MAKING POSTERS

76 Materials
76 Classroom Management
76 Teaching Procedures
77   Developing Lettering Skills
77   Lettering Media
78   Cut-paper Letters
78 Suggested Experiences
78   Grade 2
78   Grades 3 — 4
80   Grades 5 — 6

83 CHAPTER FIVE: WORKING WITH PAPER

84 Materials and Their Uses
85 Classroom Management
86 Teaching Procedures
87   Basic Skills
87   Cutting
88   Folding, Creasing, and Rolling
88   Measuring
88   Fastening Shapes or Forms
89   Decorating Forms or Articles
90 Suggested Experiences
90   Grades K — 2
92   Grades 3 — 4
93   Grades 5 — 6

95 CHAPTER SIX: USING CLOTH AND TRIMMINGS, YARNS AND FIBERS

96   Basic Materials for Grades 2 — 6
97   Additional Materials for Grades 3 — 4
97   Additional Materials for Grades 5 — 6
97 Classroom Management
98 Teaching Procedures
99 Suggested Experiences
99   Grade 2
99   Stitchery
100   Grades 3 — 4
100   Stitchery
102   Sock Toys
103   Pattern Making
104   Weaving
106   Grades 5 — 6
106   Stitchery
106   Pattern Making
107   Weaving
107   Hooking

111 CHAPTER SEVEN: BUILDING WITH BLOCKS

112 Materials and Their Uses
114 Suggested Experiences
114 Grades K — 1
115 Grade 2

119 CHAPTER EIGHT: CONSTRUCTING WITH WOOD AND OTHER MATERIALS

120 Materials
120 Classroom Management
121 Teaching Procedures
123 Suggested Experiences
123 Grades K — 2
125 Grades 3 — 4
126 Grades 5 — 6

129 CHAPTER NINE: PUPPETS AND PUPPETRY

130 Materials
131 Teaching Procedures
133 Suggested Experiences
133 Grades K — 2
134 Puppets Made from a Square of Cloth
134 The Flat, Jointed Puppet
135 Paper Bag Puppet
135 Sock, Stocking, or Mitten-Type Puppet
136 Grades 3 — 4
136 Puppet Heads of Papier-Mâché
137 Grades 5 — 6
139 Constructing a Puppet Stage
140 Explanatory Note

141 DEVELOPMENTAL STAGES IN ART ACTIVITIES

153 BIBLIOGRAPHY

INTRODUCTION

The Art Program

Art is an essential area of school experience for all children because it helps to develop the whole child, not merely his mental and verbal capacities. In genuinely creative art activities, the child uses and integrates his motor, emotional, and mental capacities. The arts are not so much a body of subject matter as they are a creative way of doing things—a way which enlists the imagination of the child and impels him to learn more about things and to interpret and judge them from his own experience.

In the arts, the uniqueness of the child is valued. His varying capacities and uneven rate of development are factors in the selection of art experiences. The arts demand a sympathetic and individual teaching approach and an evaluation of the child's progress in relation to his abilities. There can be no predetermined and unvarying standard that all children must meet at the same age level or in the same period of time. The goals and activities must be flexible so that they can be adapted to children's needs as these emerge in the course of pupils' experiments with materials; or as indicated by their attitudes or their questions. In a congenial atmosphere in which a child feels secure and confident, and in which basic materials are provided and necessary procedures are understood, he will learn best through investigating and manipulating materials without step-by-step direction.

Children need to be understood and valued for themselves. Those who are doing their best must be aware of approval, and the insecure child may need special recognition for small achievements. Some children get satisfaction from merely experimenting with materials and may not always make a "finished" product. They should not be made to feel inadequate because of this. A little more time, encouragement for effort, or providing a different material often will help such children.

Art as Self-Realization

In art experiences children find a means of self-realization. Painting and other manipulative art activities help children to objectify their feelings and ideas. Children do not consciously plan their art work as a way of understanding themselves better or of "saying" something without words. There is good reason to believe, however, that the process of painting gives the child a sense of expressing something that he feels, and that the act of looking at the finished product gives him a new realization of what he has expressed. Creative thinking that reaches the child's greatest potential in art reveals to him a power that lies dormant within, causing him to react, saying, "I didn't know I knew how to make it." Herein lies the real excitement shared by all children who are challenged to express themselves creatively. It is probable that most kindergarten and first-grade children use art for communicating with themselves and are not concerned with it as a means of communicating with others.

Values

Art experiences help develop personal sensitivity and reliance on one's own taste and judgment. The use of manual abilities and the expression of feelings and ideas with different materials counterbalance some of the verbalization and factual learning of other areas.

Original creative work taps inner resources, gives a sense of personal satisfaction and confidence, and often awakens life-long interests.

As more is known about child growth and development, teachers have come to understand ways in which art can meet children's needs and further their potentialities. Art experiences can stimulate and satisfy the exploratory and constructive needs of children. There is sensory, tactile, and emotional satisfaction in handling and manipulating materials.

In the arts, there is the satisfaction of direct learning. The child uses basic materials and learns to know them intimately; he learns what they are like and what can be done with them. He also learns about properties common to many kinds of materials. In building with blocks, he learns about size, weight, texture, and proportion. He learns that blocks may be set separately, on top of one another, or together; he learns also that, however they are set, they must have balance or they will fall. He learns that clay may be patted, rolled, or molded, but that it is responsive to such manipulation only when moist. He finds that clay becomes rigid as it dries, and breaks off easily if used for thin, extended shapes. He discovers that wood is resistant and must be shaped with a tool; that pieces of wood may be fitted together. He learns that paint is fluid and colorful, and that it can be easily guided into shapes by a brush; that crayons are good for making thin lines and drawing definite shapes. Cloth, he finds, can be folded, gathered, cut into shapes, stitched together, and made to fit around things; yarns and cords can be knotted, braided, or woven.

Working with art materials also provides opportunities for the constructive release of feelings. Repressed emotions are given a constructive outlet. As a result, the child achieves relaxation and contentment. Even the physical activities related to art are satisfying. Standing before an easel with paint and brush, the child gets a sense of freedom and power from the rhythmic swing of his arms and body. Clay has a tactile appeal; children enjoy its plasticity and the experience of pounding and rolling it. They like to make and re-make forms. And so it is with other art media; all afford a constructive outlet for physical energy.

Art activities help children to become aware of the value of order-

Examining the form and texture of weather-beaten wood liness, planning, and care of materials. Pupils soon recognize the practicality of a well-organized work space; know where materials may be found; learn how to handle tools and materials without accident; and delight in being free from interference. Working efficiently in the arts program entails having respect for materials and equipment, and consideration for others. Children take turns in using equipment, sharing materials, learning not to interfere with the working conditions and the art products of others, and assuming responsibilities for certain duties. As time goes by, pupils can participate in group activities where the special contribution of each is recognized as essential to the success of the project.

Scope

In this manual, the term "arts" includes painting, drawing, and modeling, as well as designing and constructing with various materials. It also implies the development of sensitivity to beauty, both in nature and in art.

The term "design" does not refer to the mere surface decoration of an article. In painting and drawing, design involves the arrangement and balance of colors and shapes. In crafts, it involves the relation of the entire form both to its use and to the material from which it is made. The design of an object includes its proportions, its textures, and its color. Design also enters into the arrangement of ready-made objects, as in the plan of an exhibition or the furnishing of a room. Design, therefore, so pervades and affects every stage of planning, producing, and arranging that it cannot be treated as a separate area. In the manual, therefore, it is referred to in all art experiences.

Appreciation, the awareness and enjoyment of quality or beauty, is implied or suggested as an outgrowth of every art experience. Appreciation, like design, is included in all areas of art.

Broadening Appreciation

A child's appreciation is broadened as he is led to look, to discover, and to understand. Art concepts relating to color, line, form, space, texture, and their interrelated functions form the basis for the development of aesthetic understanding.

Helping children become aesthetically sensitive should start within the realm of their own creative activities. Frequent and continuous art experiences and ample opportunities to make art judgments gradually help improve the child's insight and taste. As a child experiments with various media, he becomes familiar with their many possibilities for expressing his ideas and feelings. When a problem has been completed, the child's visual perception may be further developed by a class evaluation of all the pupils' work.

At the end of a painting lesson, for example, thought-provoking questions might be asked: "We all started with the same colors: red, yellow, blue, black, and white . . . Why don't all our paintings look alike?" Discussion will lead children to sense similarities and contrasts in the creative expressions of the whole class. During the evaluation period following other art activities of both two and three-dimensional nature, the teacher always leads the discussion in such a way as to help children identify art qualities and their effective uses.

Viewing color reproductions of the work of recognized painters is helpful in extending the experiences of children and in helping them become more sensitive to design and color. Pictures shown to children must have a story or meaning simple enough to be easily understood, and they must be painted in a way that is correspondingly direct and simple. If works of art are shown in which the artist used his media simply and directly as children do, and as Dufy and Matisse did, there will be a basis for better understanding. Paintings by Matisse and Braque, for example, that have simply patterned subject matter and rich, strong color, will be enjoyed by children. The childlike work of Rousseau, Bambois, Hicks, Grandma Moses, and other primitives, as well as that of early Renaissance artists will be understandable to children. If children have been experimenting with mixing colors, the work of other artists may be shown. Those of Corot, Cézanne, Roualt, Monet, and similar artists might be enjoyed for their use of subtle color. Older children can begin to recognize the imaginative use of color by such artists as Renoir, Degas, Van Gogh, Gauguin, and Dufy. They will also enjoy the fantastic paintings of Miró and Chagall.

In looking at the work of these and many other artists, children will come to realize that, although artists differ in the way they paint and in their interpretation of a subject, the work of a painter, or any other artist, must be judged by the way he designs with lines, shapes, forms, spaces, and colors.

The study of paintings by masters is only one means of developing appreciation. Sculpture, drawings, constructions, and fine craftwork can be shown to help children sense good proportion, fine color, or interesting texture. Examples may be drawn from the wide range of primitive and folk art to that of contemporary art.

Trips to museums and galleries will help children relate art objects to the lives of people in successive centuries. The importance of sculpture in the lives of early Egyptians; of arms and armor to people of Medieval days; and ceramics and weaving to primitive peoples will be felt by children when seen in surroundings that suggest earlier periods of time. The teacher should always prepare children for what they are going to see on their trips, and review with them the art qualities that were most apparent.

A child's environment provides a ready source for developing visual awareness. A walk in the park or neighborhood to find a fallen leaf; to look at the shapes of clouds in the sky; to feel the bark of a tree; to visit a pet shop to see the shapes, colors, and textures of animals, birds, and fish; to stroll over a bridge to look at the colors in the water and the shapes of boats going by; to observe the colors and shapes of buildings, store-fronts, cars, trucks, and buses will lead children to be more aware of their surroundings. Their pleasure increases as they find more and more to see in the world around them. In planning a class trip, the teacher should stress the importance of close observation and the value of recalling remembered scenes.

The child's participation in the arrangement of bulletin boards, the preparation of displays, the color choices of background papers for corkboard areas, the placement of accessories, such as plants, globes, fish tanks, and color reproductions, makes him realize that he can affect the appearance of his own environment. A cheerful, well-arranged and attractive classroom helps the child develop good taste. The classroom should not be obtrusively decorated, nor should it have too many pictures and objects. Rather, it should be restful, with a few color accents. With thought and ingenuity, teachers and children can make even old classrooms into pleasant places for living and working.

Appreciation may be broadened when the child's successful classroom accomplishments are shown to the rest of the school through hall and lobby displays, school-wide exhibitions, and assembly programs. Decorating a gymnasium or lunchroom for a party offers a variety of activities in which the child grows in appreciation as he sees a dramatic use of his imaginative thinking.

The development of the child's appreciation will be carried over into his home and into some of his recreational activities. Spontaneous comments by a child as to changes he has made at home or at his scout club rooms indicate that he is applying his appreciation of art to the improvement of his environment.

By providing opportunities for children to work creatively with materials, by introducing children to masterpieces of painting, sculpture, weaving, jewelry, and ceramics, (through museum trips and discussions of visual aids) the teacher enriches their appreciation and enjoyment. Recognition of the child's environment and the voluntary extension of art activities to his personal life provide a desirable part of a child's total growth.

Schools should collect, over a period of time, a supply of good color prints, textiles, pottery, sculpture, and other objects that can be borrowed as needed. This kind of collection makes it possible for the teacher to make frequent changes and to stimulate children's interest.

A list of color reproductions suitable for school or classroom decoration may be found in the 1963-1964 Textbook List and in forthcoming Supplements and Textbook Lists. Small reproductions of sculpture are similarly listed.

Teacher's Role

Planning

The teacher should provide a friendly classroom atmosphere and organize an efficient working set-up. In art activities, the child should be encouraged to handle and experiment with a variety of materials—paint, blocks, clay, paper, crayons, chalk, wood, cloth, and yarns—but should be introduced gradually to this variety so that he is not confused by "too much too soon." The teacher will need to plan working schedules so that each child has his turn with various art media and is allowed sufficient time to gain confidence in using them. The teacher must carefully consider planning and adaptability of routines and management so that children can gradually assume responsibility for the care of materials.

Each teacher of art should plan an over-all outline of the year's work, including the use of media described for the grade levels in this manual. Since painting is an activity that is fundamental to all others, it will be given the largest time block. Drawing, which usually involves large groups or the entire class, will be an on-going activity with an emphasis that varies throughout the entire year. Group work in making posters and in designing and constructing with materials, such as clay, paper, wood, cloth, and yarns, may be planned in blocks of time, each covering approximately two to four weeks.

When there is sufficient material available, work with colored paper and with cloth, yarns, and trimmings may be engaged in by an entire class. Puppetry, which involves several group activities and terminates in the production of a play, may require a period of several weeks during the middle or latter part of the year.

In organizing a weekly plan, the teacher is guided by the following time allowances recommended by the Division of Elementary Schools:

Minimum Time Allotments for Art Activities Each Week

Grades K-3	150 minutes
Grades 4-6	75 minutes

In daily planning, the teacher will invite pupil participation to determine the art activities in the class "Program for Today". The length of the working period devoted to each art activity will vary, depending on the nature of the materials and on the needs, interests, and age level of the particular group. In a school with neither a special art room nor a special art teacher, all art activities will be carried out by teachers in their own classrooms In either a one-teacher situation or in a team-teaching arrangement, the art activities may be carried out by the class as a whole or by supervised groups. In the regular classroom where painting is done at one or two easels in the art corner, the teacher will plan for four to six children to take turns in painting at intervals during the school day. In schools where upper-grade classes go to a special art room, a large group or even an entire class may paint or engage in other art activities at the same time.

The teacher should have experimented with all of the materials and should know something of the possibilities and limitations of each. The teacher will have discovered satisfaction in exploration, the freeing of ideas, and the joy of creating something of one's own. The material "determines" to some extent, what the child can be expected to do with it.

The Structure of a Lesson

The teacher plays an active role throughout the entire lesson period, motivating, guiding, and evaluating the work as it progresses from start to finish. Motivation is most important at the beginning of a working period, and it continues as a part of the teacher's guiding and evaluating. Through discussion and in response to the teacher's questions, the child is stimulated to express his ideas and feelings in a personal and unique way.

While the child is working, the teacher's role is to help him solve his individual problems. Teacher guidance takes the form of appreciation of honest effort and encouragement to think clearly and to express honest feelings. It is important that the teacher know something of the growth pattern of artistic development which children are likely to follow with each material.

The teacher can reinforce art learnings by conducting individual, group, or class evaluation of completed work. Praising a child for the growth he shows, however little it may be, serves to encourage him toward higher achievement and helps other children who are brought into the discussion.

The child's first experience with a new material should include investigating and manipulating it without repressive direction. Some children are so stimulated by a material that they are eager to discover what they can do with it; others are a little slower to start. The teacher should be patient with first efforts and encourage the child to use only a few colors and a few materials, to work slowly, and to do his best. The way the child feels as he works and as he looks at his product, is the true criterion of the value of the experience for him. The teacher should remember that the important thing is for the child to think and to work creatively at his present level, even though the product may not be regarded as "finished" or "artistic." The teacher, therefore, being familiar with these goals, will neither dictate how to do things, nor give or draw patterns for the child to copy. The teacher will be prepared to answer questions and guide the child to think more clearly as he meets new problems and experiments with new materials.

The Special Art Teacher

It is highly desirable that the art quota-teacher have classes scheduled in a special art room. When there is no place for a special art room, the quota-teacher must move from room to room. Since the teacher's schedule may permit only a limited time with the classes she meets, the classroom teacher must continue the art activities, building upon those started by the quota-teacher or initiating experiences that are either a direct outgrowth of previous art learnings, or that enrich other curriculum areas.

The quota-teacher's art background and special interest in the art of children enable her to act as a consultant for teachers in the implementation of this manual and in the use of "Teaching Guides: Painting; Drawing; Designing with Paper; Puppets and Puppetry." Through her enthusiasm, sensitivity, and knowledge, the art teacher can bring new vitality to a school's art program.

Learning how to store materials

Classroom Management

A well-ordered and attractive classroom creates a stimulating atmosphere that serves as a strongly motivating force in a creative art program. When children are given the opportunity to live among pleasant and organized surroundings, they become aware of the value of orderliness. They find it an incentive to purposeful work and to economical use of time and materials.

Well-designed rooms in newer school buildings have many features that make it easier for the teacher to provide the best physical environment for growth in the arts. New elementary classrooms provide larger floor space, a flexible arrangement of furniture, and adequate storage cabinets. However, even old classrooms can be made into more pleasant living-and-working places. In classrooms used by young children, the arrangement of equipment, supplies, and working conditions must be the responsibility of the teacher. Older children will be able to assist in planning changes in their rooms. They may have good ideas about the placement of tables, easels, and storage cabinets to insure that all activities go on as smoothly and pleasantly as possible. Children who have had a share in planning the arrangement of their room are likely to be more concerned with keeping it in good condition. As children participate in various practical art experiences, they become more aware of art qualities in the things they see around them, and more interested in assuming their share of responsibility for improving and maintaining pleasant living conditions at school and at home.

An enriched art program requires storage, distribution, collection, and conditioning of a wide assortment of materials. The teacher needs to have a clear idea of the problems involved and to enlist the help of the children in solving them. Seating arrangements, group assignments, traffic lanes, accessibility of materials, "before" and "after" routines, and a monitorial system must be reviewed, or rehearsed beforehand so that the art lesson will proceed in an orderly manner. While basic routines and management are being introduced to a group or class, the teacher will find it advisable to plan initial activities that require only a few materials and a minimum of teacher guidance. This will enable the teacher to focus attention on the problems of management and avoid confusion.

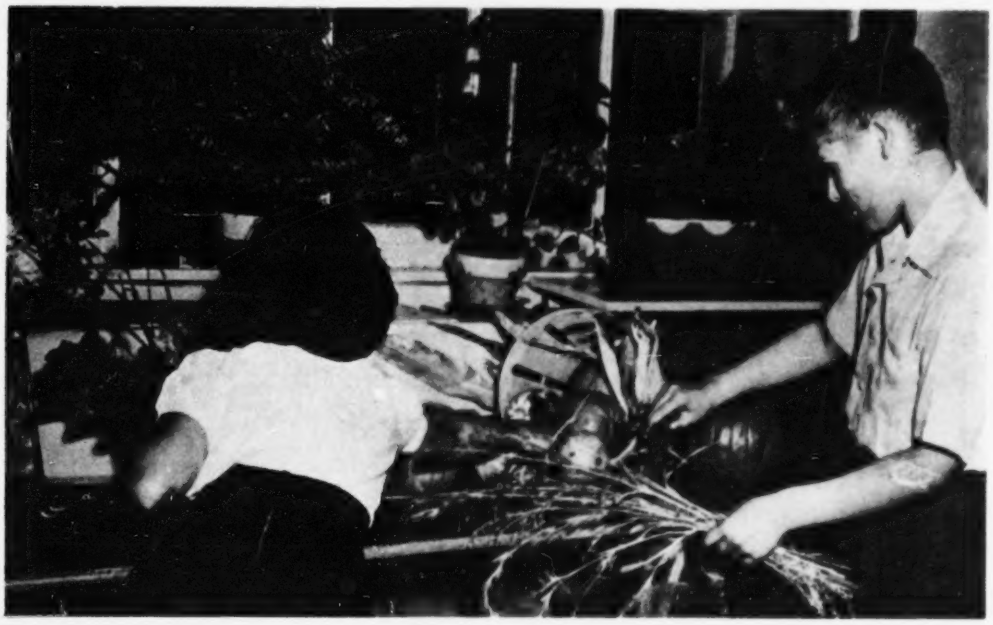
Since storage space is always at a premium, it is advisable that the teacher and class occasionally review work filed in art folders and discard those paintings and drawings that have served their educational purpose, but are no longer valued for their art quality. Incompleted drawings and stitchery may be kept in separate envelopes in children's desks and worked on at free moments. When this is not possible, envelopes may be collected for storage according to groups or rows.

Each teacher should be familiar with the special needs of her particular classroom situation and must often adjust procedures efficiently and creatively to meet these needs.

Functions of Display

The excitement and enthusiasm generated by a stimulating and attractive display of two and three-dimensional materials make possible an immediate and effective communication of information and ideas. As visual aids, displays provide another means through which the child acquires concepts and knowledge. The impact of visual experience promotes interest and encourages retention of learnings.

Corridors, bulletin boards, and special display cases are a school's "showcase" for creative art as well as for work in other curriculum areas. The arresting quality of a colorful, well-designed arrangement excites interest and becomes a source of pride for both teacher and child.



Planning a colorful display

Children gain a measure of self-assurance through a display of their work. The spark of enthusiasm engendered when his creative art work is shown may encourage a child who, because of a language barrier, is finding it difficult to communicate his ideas in other areas of learning.

As a creative experience, a display offers teacher and children a practical problem in color and design. Participation in choosing and assembling classroom or corridor displays gives children an active and personal share in improving the appearance of their surroundings.

Ready-made cutouts, silhouettes, and other holiday commercial decorations, such as Halloween cats and pumpkins, serve no educational purpose. Display of these stereotyped forms tends to restrict the child's creative imagination. Furthermore, the need for decoration presents an opportunity for the display of children's pictures and creative crafts. Since classroom windows are a source of light, it is not advisable to use them as a display area.

A guided group discussion of the art qualities and the organization of the work displayed becomes a tool for furthering art appreciation. Good displays demonstrate to parents and other visitors many phases of the curriculum and related school activities; they encourage favorable public relations. Work displayed in prominent public areas should reflect standards appropriate for the grade level. Work that falls below these standards but reflects honest effort and progress, may be honored in classroom displays. Just as a display of pictures and other art objects give warmth and personality to a home, a stimulating and well-designed display contributes these same qualities to a school environment.

Planning a Display

A well-planned display should revolve around a unified theme or a group of closely related ideas. The subject, once decided upon, should be headed by an eye-catching slogan, title, or caption. When a thought-provoking question becomes part of a display, it invites the child to stop, to look, and to learn. Background materials and other elements of a display may be chosen according to availability, appropriateness to theme, and limitations of the display area. The use of these materials challenges imagination and ingenuity. Trial layouts may be arranged on a large table or floor space for the purpose of evaluation and possible change. The following questions may be considered: "Does it attract and hold attention? . . . Is the message clear? . . . Have one or two colors been used to unify groupings within the arrangement? . . . Is sufficient space left for uncluttered background and marginal areas? . . . Has a dramatic note been introduced through the use of three-dimensional elements, such as projecting shapes of paper or cardboard?"

Legible lettering is a prime requisite in a good display. It is best to use manuscript writing or the simple Gothic letters that the child has been taught in poster making. The caption or message may be done with brush, lettering or felt nib, pen, crayon, or cut paper. When there is a considerable amount of text, a primer typewriter may be used. The G-1 List offers commercial ready-made alphabets, such as gummed-paper, cardboard, and plastic pin-back letters. Lettering and the space it occupies should always be planned as an integral part of the display.

All materials to be displayed should be mounted. A mat that frames the material or a colored mount against which it is arranged provides a contrast to the background color of the display board and gives emphasis to the display itself. Stapling an illustration to a mount is the simplest method of framing it. A wider margin at the bottom of the mount or mat will improve the appearance of a picture. However, new effects may be secured by using an underlay of large paper shapes or strips to form a simple, well-proportioned background pattern.

Well-arranged displays promote learning situations

At least one piece of art work from each child should be included in a display at one time or another. The idea of "best artist in the class" should never be fostered since the work of every child has its own special and personal merit. Work displayed should be properly identified.

wing a Froppe.

Planning an effective display

A primer typewriter is suitable for this purpose.

The following basic materials essential for preparing a hall display can be stored in a large carton and borrowed by the class and teacher who need them: wall stapler and staples, thumbtacks, pins, yardstick and rulers, large scissors, rubber cement and brush, boxes and folders of commercially-made letters, felt-tip marker, or lettering pens and ink, string, and yarn. Colored construction paper, size 12" x 18" and 24" x 36", large mounting boards, corrugated cardboard, and other suitable papers and boards should be readily accessible.

Effective display involves consideration of simplicity, unity, emphasis, balance, color, and dramatic appeal in the arrangement of material related to the current interests and on-going projects of the class. Since timely topics provide the most meaningful and exciting displays, it is important that they be changed frequently to reflect current interests.

Art and Other Curriculum Areas

Art is an integral part of the entire school curriculum. It intensifies, clarifies and reinforces the whole body of learning. The child who has a background of creative art experiences brings inventiveness, increased powers of observation, and a sense of order and organization to all school activities. The child's own ideas and feelings, motivated and expressed through art, bring an emotional dimension to factual learning, making it more personal and meaningful. Art encourages the child to rely upon his own way of expressing things, helping him to identify himself with the subject. Thus the experience has both educational and artistic value. The continued opportunity to make selections and judgments, to experiment and to solve problems in an individual way, gives the child a pattern of approach in other learning situations.

Art's infinite variety offers each child an opportunity for success. The enthusiasm and self-acceptance that are engendered create a favorable climate for learning in other curriculum areas and may be among the incentives that make a child eager to attend school. Art activities necessitate group work and the sharing of materials in a well-organized setup. This cooperative effort establishes work habits valuable in all school activities.

While art should not serve merely as a "handmaiden" for other areas of study, there are many direct ways in which it can clarify and vitalize learnings associated with other curriculum areas. These are discussed in the sections that follow.

Art and Social Studies

Drawing, painting, and various craft activities can heighten the interest and objectify learnings in social studies by giving them visual form. The child needs clear and full information about a subject before he can make illustrations or constructions that will show his ideas or feelings about it. Movies, television, colored slides, a trip to a museum, or other research material may help to clarify a remote situation and bring it to life for the child. If pictures are used to stimulate ideas, the child needs to see many of them. A single illustration may make such a strong impression upon the child's memory that he will have difficultly thinking of another aspect of the subject. Illustrative materials should be put away before the child begins to work. Broader research is motivated when the child is guided to select for personal expression those phases of the subject that are not pictured in the resource books.

With proper stimulation and sufficient information, children who have had previous creative art experiences will think of many ways to express their ideas and feelings, and their products will show fresh points of view. A fifth-grade group might be studying about Colonial times. Through books and the observation of realia, such as carvings, clothing, dolls, cooking utensils, woven mats, and rugs, the child will acquire information about activities and hardships of Colonial people and may compare their daily experiences with his own. He will visualize how children lived at home; their outdoor games; the occupations of

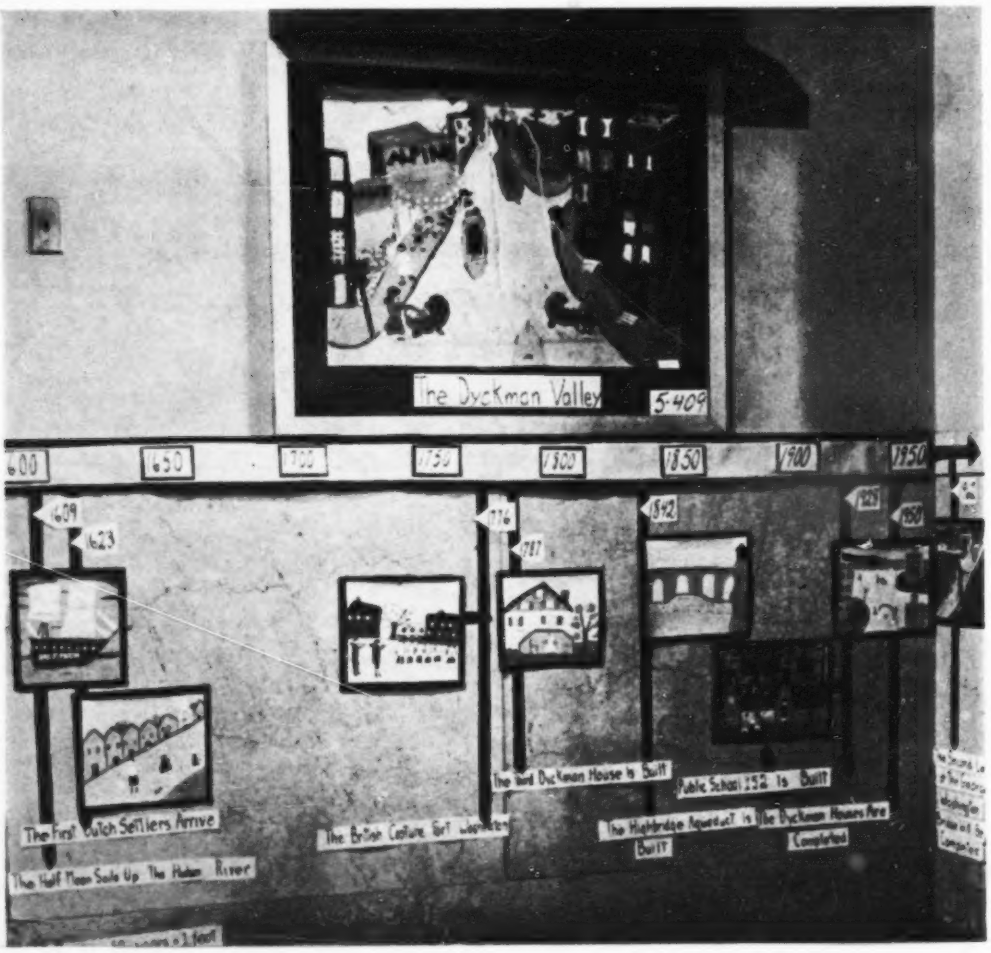
Gaining background information for a chosen subject fathers; how mothers cared for their families; how people visited their friends and participated in church and community affairs.

Motivated by this research, his drawings and paintings may reveal his understanding of the period. Skill in the use of art media will increase his ability to personalize the experience rather than to repeat the standard formulas so often to be found in book illustration.

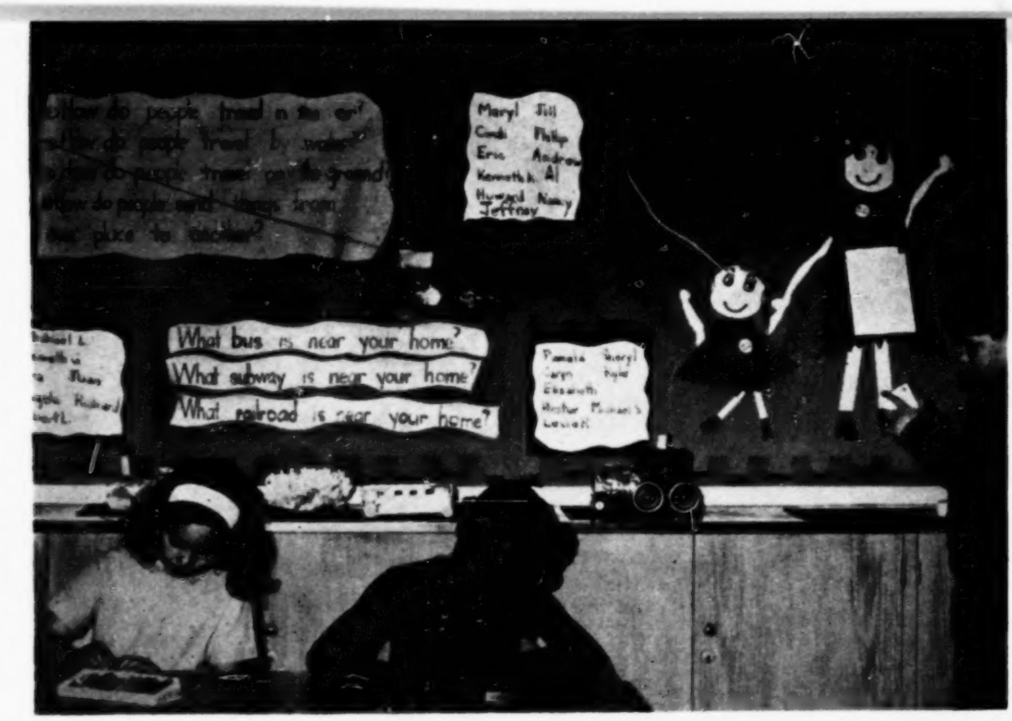
In one school, where the children were making a study of Latin America, the subject was brought to life for them through the arts of the various countries. While visiting a museum, they saw fine examples of weaving from ancient civilizations. They were surprised to learn that the beautiful colors were made from roots and herbs, and that the remarkably fine weaving was done by hand on a simple loom. Motivated by this interest, the children expressed a desire to do some weaving. The teacher discussed with them the simple types of looms they might construct. Using cord, tinsel, braid, or other materials available, they made articles they could use, just as the ancient peoples wove what they needed. The children enjoyed weaving and during another visit to the museum, they looked at woven pieces with greater interest. They appreciated more fully the art quality of the exhibits, and were more observant of the expert craftsmanship and remarkable designs of the early weavers because they themselves had had some experience in the craft.

In another school, a group of children collected pictures of life in Mexico. These were mounted carefully, given neatly lettered titles, and bound attractively into booklets of original design. So many interesting articles were brought to class by pupils and teachers that a small group assumed the responsibility for designing and setting up a display. Identifying labels were lettered for each exhibit.

Three-dimensional work is often desirable for art expressions related to social studies. The child might wish to express his feelings about


The Dyckman Valley
5-409
1600
1650
1700
1750
1800
1850
1900
1950
1609
1623
1776
1842
The First Dutch Settlers Arrive
The Half Moon Sails Up The Hudson River
The British Capture Fort Washington
The Last Dyckman House Is Built
Public School 152 Is Built
The Highbridge Aqueduct Is Built
The Dyckman Houses Are Completed

Dramatizing a "time line"



Imaginative displays can stimulate ideas

people by making dolls or puppets with stage settings appropriate to the characters and period of time. Speech, dramatic action, and lighting problems further challenge the child's imagination and inventiveness.

Art and Mathematics

Art provides a non-verbal, visual, and tactile approach to teaching and learning mathematics, thus deepening and clarifying the child's understanding. Art enforces a mathematical concepts by presenting them in concrete form. Mathematics is concerned with exploring and understanding placement, size, weight, shape, and distance. These are also basic art learnings.

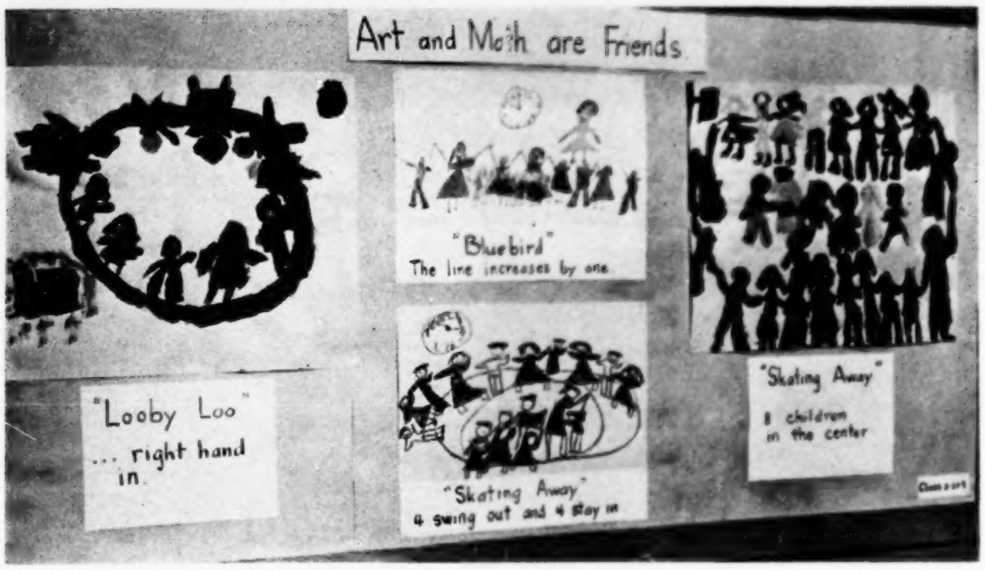
A child may use his own creative expressions to discover number facts and to develop mathematical thinking. For example, young children discover mathematical facts and relationships as they discuss their creative work. When evaluating a painting lesson, a teacher might ask the following questions: "Can you find the largest shape in your painting? . . . Which is the smallest shape? . . . Can you find a shape that is near the top; near the center; near the side; or near the bottom of your picture? . . . What is the most important color in your picture? . . . Why is it important? . . . Which color looks heaviest? . . . Why does it look heavy? . . . Which object is farthest away? . . . Which object seems nearest to you?"

A young child may start with a mathematical concept and represent it visually. If his expression is a creative one he grows in his ability to feel, to think, and to see. For example, as the teacher develops the concept of 5, children may make original drawings to illustrate various groupings within the numeral 5.

Upper-grade children can make the concept of time relationships meaningful when they illustrate important dates. Two and three-dimensional approaches may be used for time-line projects.

Art and Language Arts

Creative expression in writing and in art both have as their source



Relating number concepts to creative expressions

the child's personal feelings and ideas. When he wishes to express ideas in art, images are evoked through discussion. Descriptive words and phrases that are developed may be listed on the board. For example, when describing a giraffe, some children suggested the following: "a long neck reaching toward the sky . . . sharp, listening ears . . . looking down his nose at me . . . knobby-kneed, boney, skinny . . . the front legs longer than the back." These words recall a visual experience, clarify the child's mental image and give him increased power to express that image in an art medium. The child who is merely asked to "draw a picture" finds himself in the same unfortunate position as the child asked to "write a composition." In both activities it is necessary for the teacher to guide the child to observe closely, to use descriptive words that clarify his observations, and to become aware of his sensory experiences. This guidance, as well as the opportunity to record personal reactions through the use of art media, will build the child's readiness to express himself in verbal form more fully and sensitively.

Teaching techniques involved in the development of creative art have their parallel in the development of expressional writing. For example, ideas about a topic for a story-telling picture may be developed by asking children the "who," "what," "where," "why," "how" types of questions. Children may be given "on-the-spot" help in organizing and expressing their ideas and feelings. Good qualities in children's art work may be pointed out and praised through individual or group evaluation. In creative art and expressional writing, considerations of composition are involved, such as organization around a main topic, focus on an important highlight, introduction of a surprise element, and the inclusion of other elements that contribute to the total "picture." The skillful teacher's guidance, however, never allows the need for organization to hamper spontaneous, childlike expression.

An enjoyment of art can stimulate creative writing

Oftentimes, a child's painting, drawing, or other art product, when finished, stimulates his imagination and creativity in language arts. His work may be the inspiration for an original poem or story. Challenged to think of a suitable title for his art work he may suggest unusual, colorful words, such as "The Murky Mists of Halloween" or "My Undersea Garden."

Language skills may be stimulated through a study of the work of master artists. Some children in a fifth or sixth-grade class, after visiting a museum or seeing reproductions may select the work of one artist for intensive study. Discussion and skillful questioning about the ideas and art qualities found in this work may provide incentives for assigned reading, free reading for recreational purposes, and oral or written expression. Art books and magazines at the children's reading level may be put on reserve in school and neighborhood libraries. Slides, filmstrips, and movies can be used to extend the children's knowledge of the artist and his work. As a culmination of the study, the class may make a bulletin-board display and contribute articles to the school newspaper.

Puppetry is a natural medium for developing language arts. It may involve either spontaneous verbal expression in which the children improvise the dialogue, or the use of a script that is prepared by the playwriting group. The creative teacher will encourage originality of expression, not only in the puppet making and dialogue, but throughout the activities involved in the production.

The art expression of the non-verbal and the non-English speaking child often provides the teacher with clues to the child's personal interests. The teacher may capitalize upon these interests in selecting stories and books. The child who is repeatedly drawing boats and ships

Art masterpieces provide an interesting field for research

New challenges stimulate ideas and expressions of them

may become interested in sea stories and books about ships. For all children, subjects for drawing and painting suggest centers of interest within which they may select material for independent reading.

Art and Science

To help the individual cope with the diversity and complexity of today's world, the school must reinforce the creative process. When the child is guided to express himself creatively with art media, he is on the road to understanding the scientific approach to problem solving. In a "K-6" publication, Harry Milgrom, Assistant Director of Science, Elementary Division, states a philosophy which is equally expressive of the philosophy of art education today.

"In seeking to learn the nature of their world, children and scientists alike are motivated by:

—the feeling of wonderment, the instinctive response of the human mind to the challenge of the unknown

—the power of imagination, the faculty of the mind to conceive that which may not yet exist in attempting to explain the unknown

—the zest for exploration, the endless reaching out to new frontiers of comprehension

—the joy of anticipation, the suspenseful feeling that precedes discovery

—the thrill of discovery, the moment of climax when the nature of the unknown becomes known

—the desire for satisfaction, the contentment that comes with knowledge."

Creative art teaching and the scientific method have in common a spirit of inquiry. Both art and science give the child an opportunity to test a variety of trial solutions to a problem before arriving at the final answer.

In experimenting with a new art medium or tool, the child is encouraged to use it in many ways and then to make practical use of his findings. The exploration and discovery phases of experimentation are fascinating to the child. In art, as in science, he is led to discover things for himself. The creative spirit is brought into play as the child searches for solutions to problems. Questions from the teacher challenge the child in both areas: "What makes a kite fly? . . . How do we know the wind is present? . . . What can the wind do?"

Science experiments and exhibitions become more effective when the young scientist uses his knowledge of color and design to enhance the appearance of his project and to present his ideas with clarity. Design, which may be defined as "beauty and order," can contribute both these qualities to the individual science projects displayed and to the arrangement of a science corner in the classroom, as well as in a school or district science fair.

Art and Music

Art and music are often called the "sister arts." The natural relationship between them may be used to advantage in elementary school activities. Children can create original puppets for use in music appreciation, bringing life and interest to recorded music. A puppet pianist may direct the attention of a young audience to a lively piano solo. Music appropriate to the theme and mood can be selected for puppet plays. Young puppeteers may experiment by moving puppets in the tempo and mood of the music and gain new understanding of these elements.

Interest in finding a theme to dramatize the entrance of a puppet villain, for example, will encourage the child to listen attentively. The child's involvement with puppet players through the experience of creating and animating them makes the selection of appropriate music a meaningful activity.

School festivals offer natural situations for combining these arts. Creative art may be displayed as a background for folk dances held in an indoor gymnasium or outside yard. Simple and colorful costumes, masks, and decorative props blend with music and movement to give a festive air to these occasions. The visual aspects of placement, grouping, color, lighting, apparel, and background are a part of every performance. Plans for a school concert may include a well-designed art exhibition in the auditorium and adjoining corridors. The art exhibition, posters, invitations, and programs enrich the musical presentation and contribute to the aesthetic atmosphere.

Recorded music played during the art period may provide a background conducive to creativity. Music that suggests a theme, such as "Peter and the Wolf" by Prokofiev or the overture from "William Tell" by Rossini, may lead to personal interpretation with art media. Perceptive listening may inspire discussion that will enrich the teacher's motivation.

Acting out what music suggests may lead the young child to express himself more effectively in art. For example in "The Carnival" by Saint-Saens, the tempo and tonal quality may suggest the movement of animals, which the child may imitate. Experiencing the action enables the child to make a more meaningful interpretation. Animals may be sculptured from clay stressing the movement suggested by the music.

Ideas and feelings stimulated by attending a performance given by singers or musicians may be expressed through art media. A child's creative illustration of the concert becomes more expressive when he has been helped to see and hear a live performance. When musicians explain and demonstrate the special characteristics of each instrument, the child is able to bring conviction and feeling to his art expression.

The self-oriented child who may not be motivated through verbal means, such as discussion or story-telling, and who feels insecure about revealing his personal feelings and ideas, oftentimes may be reached through music. Singing, playing, or listening to music makes a direct appeal to the senses. Music adds the dimension of hearing to the seeing, thinking, and feeling the child brings to his creative expression. Art brings imagery and an awareness of mood to music, broadening his appreciation.

Using this Manual

This manual is intended to help all who use it:

1. Recognize and achieve the objectives of the art program.
2. Organize the classroom—including the equipment, art materials, and tools—to provide an atmosphere conducive to congenial living and efficient working and learning.
3. Plan painting, drawing, and craft activities so that children grow in satisfaction, competence, and appreciation.
4. Recognize child growth in diversified creative art activities.
5. Understand how and when art activities can best be related to other curriculum areas.

A teacher is better able to judge a child's growth and help him recognize his own progress when she is familiar with the developmental pattern of learning in the specific art area. The progressive stages of development in each area described on pages 141-152.

The viewpoint that has guided the preparation of this manual is expressed in *Art a Way of Life*, by Melvin E. Haggerty, late Dean of the College of Education, University of Minnesota, as follows: "Art for all the people is implicit in life itself and arises out of universal human needs, impossible of disassociation from a completely satisfying existence . . . For persons above the level of mere existence, the arts of life are probably more pervasively important than anything the schools now teach except the mere rudiments of learning . . . The school must recognize this universal need for art experience and build into its program a body of activities which will make children and adults more sensitive to the art aspects of ordinary living, more discriminating, and competent in relation to them."

CHAPTER ONE

Painting

Young children find that the easy spread and flow of paint makes it a pleasurable medium for communicating their feelings and ideas. Initial exploratory experiences in which each child can experiment with paint and a wide brush provide opportunities for him to gain motor and kinesthetic satisfaction and to improve in control of the media. Painting combines opportunities for practical learning with opportunities for emotional development. The child who is free to paint as he pleases grows in ability and in power of self-direction. Skills that are gained through initial experiences in painting serve to release the child for the creative aspects of the activity. Frequent and continuing experiences will lead to enriched personal expression.

Painting with tempera paint and large brushes is the basic activity upon which other art activities depend. The experimental and manipulative approach in painting gives direction to early experiences in other media. Consideration of the relations of line, color, and texture in painting provides a basis for the application of design elements to other areas of art. Later experiences that involve the painting of subject matter provide a graphic vocabulary for the child to use when the need for realistic interpretation arises in other activities, such as clay modeling and puppet making. As the child experiments with new materials, he can call upon the skills and learnings he has gained in basic painting experiences.

Materials for Painting in the Classroom

Painting may be carried on in the ordinary classroom at easels, grouped desks, and at the blackboard. Tempera paint is the basic painting medium. Pint jars of tempera may be ordered from the Supply List. The following amount of paint will allow every child in a class of thirty about one painting experience each week during a school year:

10 white
7 red
7 yellow
5 green
5 orange
5 blue
2 black
2 violet

Cleaning up after painting

The following guide list of brushes will provide for initial ordering and distribution for each class.

Grades K – 2

8— 1" bristle brushes
4—½" bristle brushes

Grades 3 – 4

4— 1" bristle brushes
4—½" bristle brushes
4—¼" bristle brushes

Grades 5 – 6

4— 1" bristle brushes
4—½" bristle brushes
4—¼" bristle brushes
4—oxhair brushes

Using a plastic tray to mix colors

Other essential equipment and materials:

newsprint paper, 19" x 22"
easels or oilcloth-covered tables
smocks and aprons

An oilcloth-covered supply table near the easel should be equipped with:

two metal trays
eight pints of tempera paint, assorted colors
small, capped containers for paint
tall container for brushes
plastic iced-tea spoons, tongue depressors, and round-bladed knives in a container
jars, plastic trays, or aluminum foil plates for color mixing
large pail for water
cellulose sponges
paper towels

Materials for Painting in the Art Room

Wherever possible, an art room should be set up to enable an entire class to engage in painting and drawing. In addition to the amount of paint needed for each regular classroom situation, the art room should be provided with sufficient materials for the number of classes that will use the room for painting experiences.

In planning a fully equipped art room, provision must be made for the maximum register of a single class. Each class that is to use the room is to be provided with the standard paint order (see pages 22, 23).

Children will work best in an orderly set-up

Additional brushes will have to be ordered:

3 dozen 1" bristle brushes
3 dozen ½" bristle brushes
3 dozen ¼" bristle brushes
3 dozen ox hair brushes

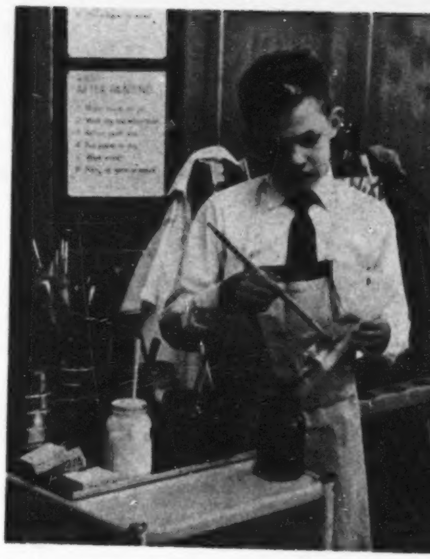
The following equipment is also desirable:

racks for drying paintings
shelves for storing pupils' art folders
storage space for supplies
display areas
classroom sink
extra waste baskets
portfolios 23" x 31"
miscellaneous items as listed on previous page, for supply table

Classroom Management

A painting situation that is well organized helps the child use his materials more confidently and more competently. The painting area should be set up in a quiet, well-lighted part of the classroom, preferably in the rear. Painting materials and equipment may be set up and shared by children working at easels or at tables grouped to accommodate several children. Additional space may be provided by taping newsprint paper to the blackboard. An oilcloth-covered supply table or shelf should be provided for paints, brushes, and other necessary materials. Large sheets of newsprint, water buckets, paint cloths, sponges, and smocks should be placed near at hand.

Since pint jars of tempera paint are too unwieldly for young children to handle, the teacher should stir the paint and transfer about one inch from the large jar into smaller containers. Older children may be trained to assume this responsibility. In the lower grades, the teacher will have to keep the paint at a "just right" consistency. Only after considerable experience with paints can children be expected to add the right amount of water, about a teaspoon at a time, and stir the mixture until it has the consistency of light cream. In order to keep the basic colors clear, it is important to caution children to use only a clean spoon to transfer paints from one jar to another. Brushes will be kept in good condition if they are washed and rinsed in cold water and stored, bristle ends up, in a tall container.

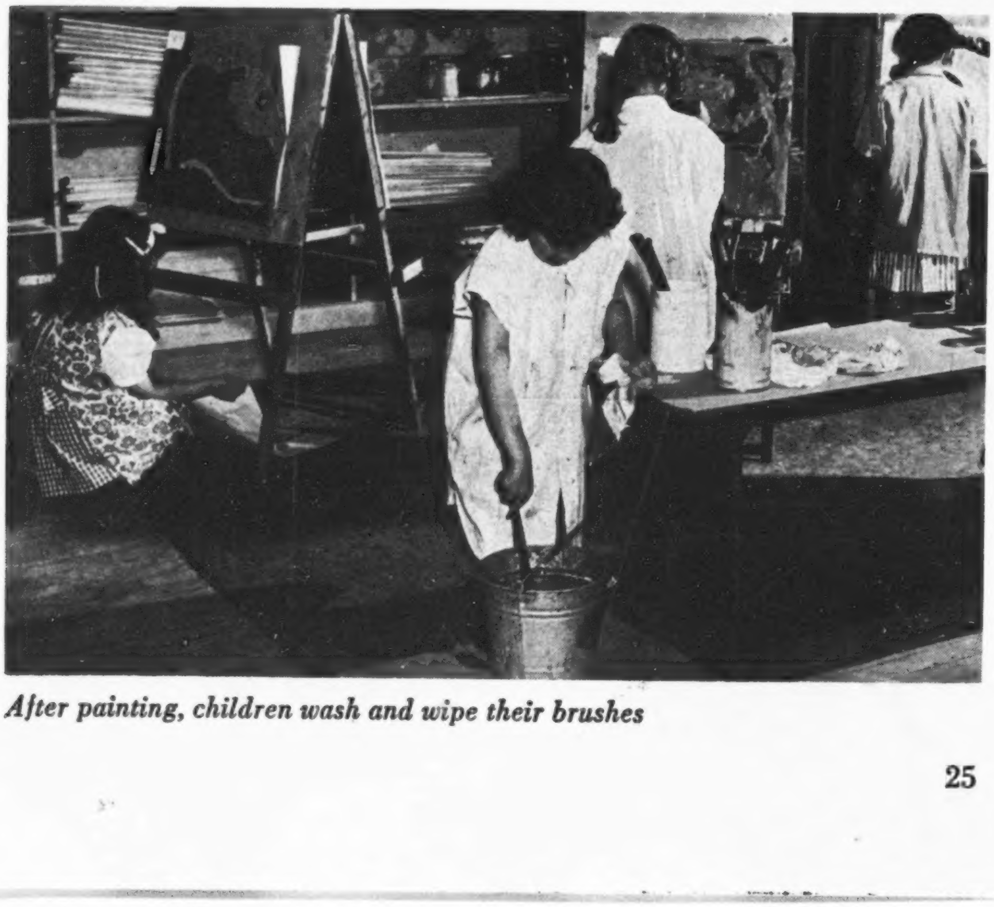


Returning unused paint to a j
holding a mixture of leftover colors

Children will need to be familiar with the basic routines that are essential before and after the painting experience. Posting charts that list these "Before" and "After" routines will enable children to manage the materials independently (See Grade Guide: 3—4 and Grade Guide: 5—6, Curriculum Bulletins, 1961-1962 series, No. 8, page 166 and No. 9, page 191.

Painting has value for all children. To insure each child in a large class his proper share of painting experiences, it is wise to post a painting schedule. Each child can have at least one painting experience every two weeks if children take turns painting during the day, while other group activities are going on. Children who read can check their own names on the schedule.

The teacher and class should discuss the routines that will keep painting materials and equipment in good condition, and make painting easier and more pleasurable for everyone concerned. Discussion might include individual responsibility for all materials and equipment used. Children should be trained to maintain cleanliness and order throughout the entire painting experience. As older children experiment in mixing colors, they should be instructed in the care and use of plastic ice cube trays or other improvised palettes. They should be shown how to conserve paint by mixing it only in small amounts.



After painting, children wash and wipe their brushes

Classroom Management in the Art Room

In schools where a classroom can be designated as an all-purpose art room, an entire group may engage in painting; or small groups may take turns at painting while others work at drawing or crafts. An efficient painting program is dependent upon a well-organized plan for distribution and availability of required materials. It is advisable to plan for several painting set-ups, each of which can be shared by a group of four to eight children.

ach child shares the responsibility or cleaning up

Some minutes prior to the scheduled time, two monitors may be assigned to perform the following duties:

remove and store paintings left to dry by the previous class
distribute clean newsprint paper
fill water containers

Painting experiences must be planned in advance so that children will come to the art room prepared with smocks and paint cloths.

The art studio provides a permanent place for the painting set-ups and enables an entire class to work at the same time. A squad should be trained to distribute trays or boxes holding small jars of paint, sponges, brushes, and water jars. As the children progress in painting, monitors can distribute additional materials for color mixing. Sufficient time must be allotted at the end of a painting period so that all children may assume responsibility for cleaning up. This activity involves washing brushes and palettes; wiping easels, trays, and tables; returning materials to allotted places; emptying cans of water; and placing paintings to dry. A monitor may collect all used sponges, wash them thoroughly and re-distribute them. The teacher should check each table at the end of the painting period so that it will be in good condition for the next class.

Teaching Procedures

A child's growth in painting is chiefly dependent upon the teacher guidance that stimulates his thinking and feeling, leads him from

One painting set-up serves children at two easels

phase to phase in his development, and helps him evaluate his achievement.

Motivation

To motivate initial design painting, the teacher need only ask the child to select one color and to discover the many things he can make a brush do: glide smoothly, hesitantly, lightly, or boldly over the paper and follow the movement of his hand, arm and, body. Sensitive color selection is encouraged by asking children to think of two colors that will look well together. "How can you make your paper beautiful with lines, shapes, and colors?"

In later design experiences, children may be motivated to experiment with paint through a discussion of the pattern and texture in familiar objects. "We are wearing plain and patterned clothing today. . . . Can you find clothes that have a plain color or pattern? . . . Look about the room. Can you find a surface that is rough, fuzzy, hard and shiny, or smooth and silky?"

After painting experiences in which the child has been engaged with color and design problems, he is ready to express familiar experiences in storytelling pictures. The teacher should set the stage by using color words and action words to help stimulate thinking and challenge attention as the child recalls vivid emotional experiences in which he was personally involved. When his imagination needs to be stimulated, the teacher may suggest a subject chosen from shared experiences or stimulated through reading. The child will then be able to identify himself with an idea and express it in an original way. Everyday experiences provide excellent subjects for pictorial expression because they are vivid and clear in the child's mind. The neighborhood, community interests, people, houses and stores, traffic, safety and health regulations suggest many interesting variations for personal interpretation in pictures.

A few questions from the teacher will motivate his thinking. "Who is going to be in the picture? . . . What will they be doing and where are they? . . . What else can you put into your painting to make your story more interesting?" The motivation portion of the lesson should be brief so that the children may begin their pictures while ideas are fresh and enthusiasm high.

Guidance

The quality of a teacher's guidance largely determines the richness of a child's expression. Guidance during exploratory design painting encourages the child to discover the many things he can do with a brush. Seeking to stimulate thoughtful inventiveness, the teacher may comment: "I see clear straight lines going in different directions . . . What other kinds of lines can you make? . . . I see you have discovered how to make shapes." As children work with an increasing range of color, the teacher should guide them to be more sensitive in selecting color and distributing it over the paper area. A more sensitive selection and distribution of color may emerge when a child's attention is focused by comments, such as: "I see a cool blue shape . . . Would you like to repeat this blue in any other part of your painting? . . . How can you help me see this light yellow more easily?" At all times the teacher's aim in questioning is to direct attention to the art element of a painting and to stimulate the child to solve his problems in a personal way.

Guidance during the working period is generally directed to individual children. When the teacher finds it necessary to focus attention on a particular learning situation, however, she may guide the entire group.

As children seek to discover real or imaginary forms in their design paintings, they may be guided away from hackneyed symbols and stereotyped forms of expression toward more individualized ideas that reflect a deep personal response. When the child discovers an interesting shape or line that reminds him of a particular thing, he should be encouraged to add or eliminate other lines and shapes to make his idea clear. The child is guided to select and use colors in an imaginative way, rather than to follow the dictates of a realistic interpretation. For example, the child who has discovered a birdlike form may be stimulated when asked to recall brilliant colors of wild birds he has seen or imagined.

Upper grade children may be interested in expressing a particular mood. They should be led to select and use expressive lines and shapes as well as dramatic colors. Comments from the teacher, such as: "I like the exciting shapes you used to suggest a hurricane . . . What colors would make you feel that a storm is brewing? . . . What colors will help you in establishing a stormy mood?"

Imaginations stimulated by the discovery phase of painting may then be directed toward pictorial expression. Through questioning, children are guided to consider the various ways in which color, size, and placement can be used to focus attention on the important part. "Keep trying to make your whole picture say just what you want it to say . . . You have good ideas. Can you make them clearer?" More experienced painters may be guided to plan their pictorial paintings by indicating with light brush strokes the size and placement of the most important parts of their pictures. If John complains that he cannot paint a particular animal that he needs for his picture, the teacher can help him to recall the important parts common to most animals, such as the head, neck, body, legs, and tail. Then John can be guided to think of the distinctive shape of the parts of the animal he plans to paint. In this way, visual memory, or the ability to recall the appearance of things, can be called into play. Directing the child's attention to the essentials of a form is better than using teaching devices, such as stick figures, patterns, dictated forms, formulas, or reference materials. These devices bring about only standardized results. They do not encourage the child's individual thinking or feeling. The teacher who has an understanding and ap-

preciation of children's art will encourage the child to be satisfied with his unique interpretation of the subject rather than a literal one. Questioning will encourage the child to use his colors with clarity, imagination, and effectiveness. "Do you have to paint the sky blue, trees green, streets gray, or can you find beautiful colors to express your ideas and feelings about skies, trees, and streets?"

Evaluation

The child's ability to evaluate his own work is of vital importance. The teacher's role is to establish goals in keeping with his level of development, his maturity, and his personal way of solving his problems. Medial evaluation may take place while the class is working so that the child may utilize suggestions related to his particular problem. A later evaluation of his completed work will establish learnings and aid him in subsequent experiences. It is advisable to select for evaluation such work as will offer a challenging variety of solutions to the problems confronting the class.

The following questions will challenge the child's thinking: "Did you express your ideas clearly? . . . Can you find an important part in your painting? . . . Did you make use of the entire paper area? . . . Did you mix and use interesting colors? . . . In which painting do you find a color combination that is unusual? . . . Which painting is pulled together by the repeated use of a color? . . . Did you experiment with different brush strokes?" As the paintings develop, story content evaluation includes questions, such as: "In which painting can you see clearly where the children were gathered? . . . What were they doing? . . . How were they dressed?" The class continues painting, bearing in mind the particular suggestions which will make the work effective and personal.

Frequent evaluations are helpful

A final evaluation helps pupils to learn from each other and to share various solutions to common problems. An appreciative audience is asked to recognize successful solutions to the questions raised during the motivation, guidance, and medial evaluation. It is understood that no one evaluation period can include all areas of art learnings. If a child's art work is on display, and the class makes criticisms or comparisons, the teacher must handle the situation so that respect for individual ideas and feelings is engendered.

Displays help children evaluate growth

Finding Evidences of Growth

Children and teacher will be encouraged by the evidence of growth shown in a collection of paintings saved over a period of time. Children are surprised at their own improvement when they arrange their paintings in the order in which they were made. Their progress may have been so gradual that it may have been unnoticed. In looking at their work, children will be helped to concentrate on art qualities if they select those that show, for example, the most individual idea; the way color has been used to interpret mood; the clearest observation; the most imaginative interpretation; the most competent handling of materials.

To help a child identify some elements in his growth, the teacher may ask questions, such as: "In which paintings have you clearly expressed your ideas or feelings? . . . How did you create a mood? . . . Where have you used colors in a sensitive or imaginative way? . . . Which painting do you like best and why?"

The teacher may look over each child's collection at intervals to determine in what ways he is growing. Collections representing work in several areas often show that the child who does only moderately well in one area may excel in another.

A display of the work of many children often serves to let individuals see the many and varied ways of picturing the same situation. When the teacher recognizes that a pupil has made unusual progress, it is sometimes exciting to give a "one-man show" displaying growth in a series of paintings. This should be done only if the child favors the plan and will not be embarrassed by it. Such an exhibition may have value both for the class and for the pupil involved. The teacher, in praising his efforts before the class, might point to several of his pictures and make comments, such as these: "I like the colors and shapes you have used. . . . The way you have painted the children in your latest picture helps us to see each one of them clearly." This type of evaluation, in which no comparison is made between one child's work and that of another, may serve to encourage the individual child, and to help other children realize how they, too, can improve their work.

To keep all of his art work together, an older child may make a large envelope or portfolio of wrapping paper or other durable material. By lettering his name on the portfolio and adding distinctive decorations, he makes his task an interesting project in design.

If a few paintings of different types are displayed neatly but without comment, they may exert a silent influence and give the children confidence in their varied and personal interpretations. It is advisable to change the exhibited work frequently so that each child will be represented during the year.

In determining the value of a child's art product, the teacher must realize that the realistic appearance of the forms or shapes is less important than what the child learns as he works. The child may have improved in coordination of eye, mind, and hand. He may have learned how to prevent drips in painting or how to care for paints and brushes. He may have grown in readiness to share materials with others, to take his turn at the easel, or to work happily with other children. He may have learned to sense good proportions, to arrange pictures attractively in a scrapbook, or to build with blocks. He may have gained confidence in his art ability and in his power to express ideas creatively. What he has learned through experience in one medium he may apply to new situations. For example, through frequent opportunities to use paint, the child may grow in awareness of pleasing combinations of colors which will influence his selection of the colored papers he may combine in making a booklet. This is evidence of a developed ability which has wide usefulness and is therefore more important to the child than any facility he may show in repeating a remembered realistic painting for the same booklet.

Water painting helps develop readiness

Suggested Experiences

Grades K – 2

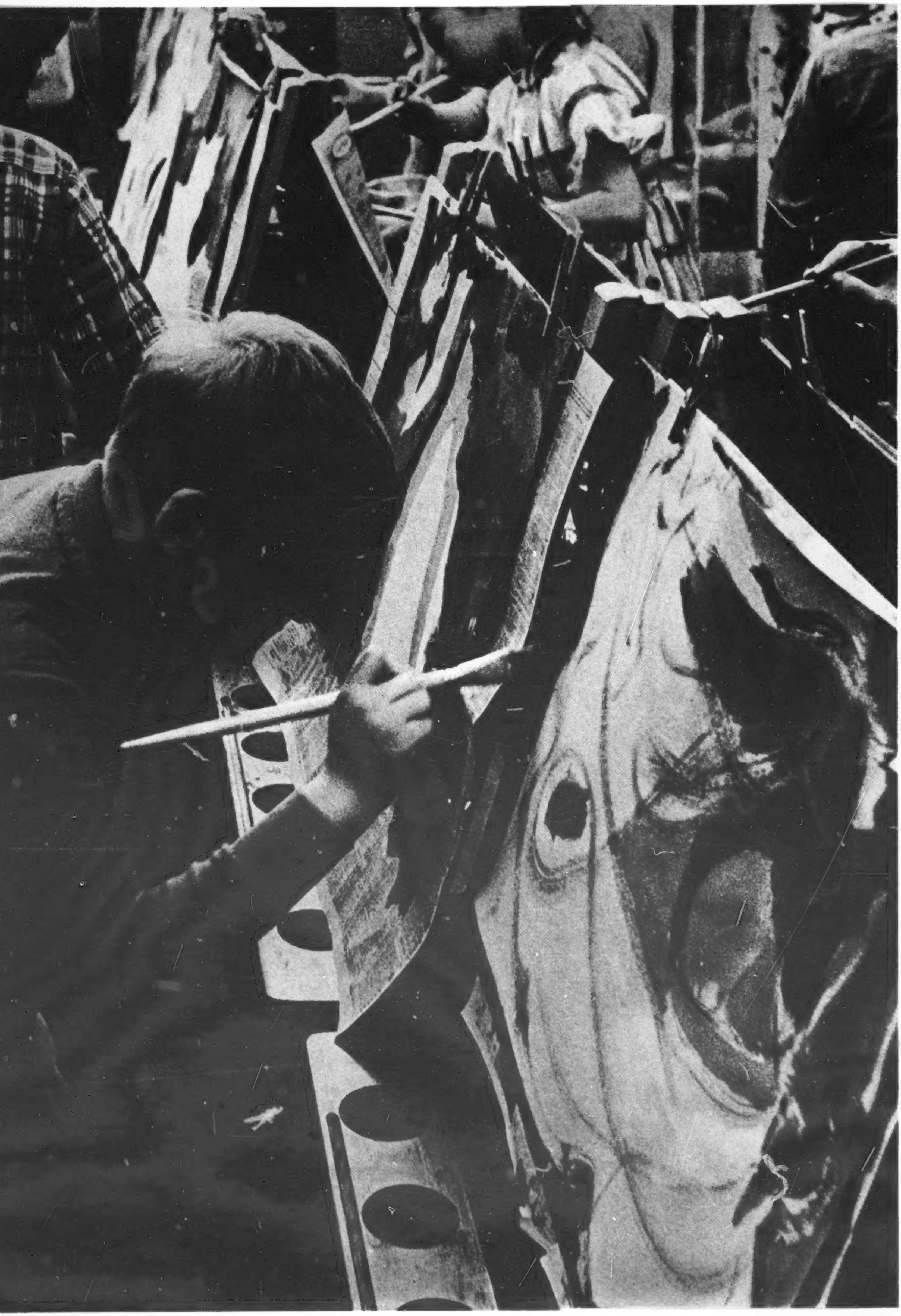
It is recommended that the young child paint with water before he begins to use paint on paper. Painting on the blackboard with a one-inch bristle brush and water helps the child to gain confidence in experimenting with his materials in a personal way. It provides an opportunity for the teacher to introduce simple painting routines. The wet brush glides easily over the surface of the blackboard and the child soon discovers that he can avoid drips and make his brush do many different things. Through the child's spontaneous experimentations, his rhythmic movements will create lines going in various directions or masses of varied shapes and sizes. A comment from the teacher gives the child confidence and encourages further experimentation. "Look at the strong, curved lines that Dan has invented." Awareness is increased as the teacher asks children to identify other discoveries. "Can you find a line that seems to hop? . . . Can you find a line that moves slowly? . . . Who used his brush to paint a strong shape?" With repeated experiences each child will grow in confidence and in control.

The child is now ready to use paint. He may select one color from a range of red, blue, green, and violet. A one-inch bristle brush and any one of the strong, dark colors used alone on the light newsprint paper provide a clear recording of his feelings and ideas. Some kindergarten children may need to paint several one-color paintings before they have developed sufficient motor coordination, while other children may be ready to experiment with two colors after an initial one-color experience. First and second grade children—even those who have had no previous painting experience of the kind described here—may need to make only one or two one-color paintings. When the child is ready to use two colors, the teacher may add yellow or orange to provide him with a wider choice of colors. It is advisable to use a separate one-inch brush for each color. The child is encouraged to use color next to color, to invent interesting shapes, to create beautiful lines, and to consider the whole area of the paper. Guidance through questioning will stimulate thinking: "Where do you see a shape you've never seen before? . . . How did Dan make his lovely shapes stand out? . . . See how Mary made all parts of her paper beautiful?"

When the teacher feels that a child can control two colors, he is then ready to experiment with three colors. At this time a half-inch brush may be added. The number of colors a child uses in his continued experiments will depend upon his individual readiness to control color and design. The challenge and excitement of a full range of colors should be made available whenever possible. At all times the child is encouraged to be more inventive as he arranges shapes, lines, and colors in his design. Since color mixing is not generally within the capability of the very young child, the teacher may mix colors as the class observes. Adding a small amount of color to white creates a pastel color. Adding a drop of black to a basic color creates a darker color. Adding a little of one basic color to another basic color will introduce the children to a still wider variety of colors. These mixed colors provide opportunities for a more personal and sensitive color selection.

Young children may be guided to look for the important or interesting part of their paintings and to invent ways to make this important part clear. Varied lines may be used to join shapes and give unity to the work.

Some form of constructive evaluation, either individual or group, should be a part of every lesson. Typical evaluation questions, devel-



oped in the design phase, are continued in all painting experiences. "Where do you see unusual shapes? . . . Where do you see colors touching other colors? . . . In which pictures do you find something made especially important? . . . How was it made to stand out clearly? . . . In which pictures do you see exciting color combinations? . . . In which pictures do you see an interesting use of the brush?"

Sometimes children find that as a design painting develops, the shapes they have painted suggest a familiar or make-believe object. In this discovery stage, the teacher may suggest that the child add other colors, shapes, or lines to complete the idea and the design. While the child is experimenting, the teacher provides a medial evaluation to stimulate the child's imagination and help him toward further discoveries of real or imaginary forms. The child should be asked to step back, look at his work, and decide on expressive ways to make his discovery clear. The evaluation questions may include, "Where do you see an interesting discovery? . . . Where do you see real or imaginary forms?"

Some children may continue with design painting, showing little interest in story content. When other children demonstrate a readiness to include subject matter content, the teacher's role is to motivate visual awareness. A discussion related to meaningful events in which the child participated evokes mental pictures. Thought-provoking questions, such as the following, will guide the child in planning his picture. "What sport are you most interested in? . . . What position did you play? . . . Who else was present? . . . What were they wearing? . . . Where were you playing? . . . Where are you going to place the important idea on your paper? . . . What size are you going to plan for the important part? . . . What other ideas can you put in your picture? . . . What colors will help tell your story?" A child may "act out" what he wishes to express in a picture. He may throw an imaginary ball or pretend to jump rope. In this way he can feel the action of his own body and clarify his mental image before he begins to paint. The child now uses his one-inch brush freely and directly, considering the arrangement of his ideas in order to make his whole paper beautiful.

Evaluation of subject matter painting asks children to consider all questions raised in the previous phases of design and discovery. Evaluation may continue with questions, such as "In which painting do you see children you would like to meet? . . . Which painting has the most interesting idea? . . . Which painting has a surprise?" Expressive "child art" is encouraged when the child feels free to experiment and express his ideas in a personal way. When the teacher honors differences in expression and interpretation, individuality is fostered.

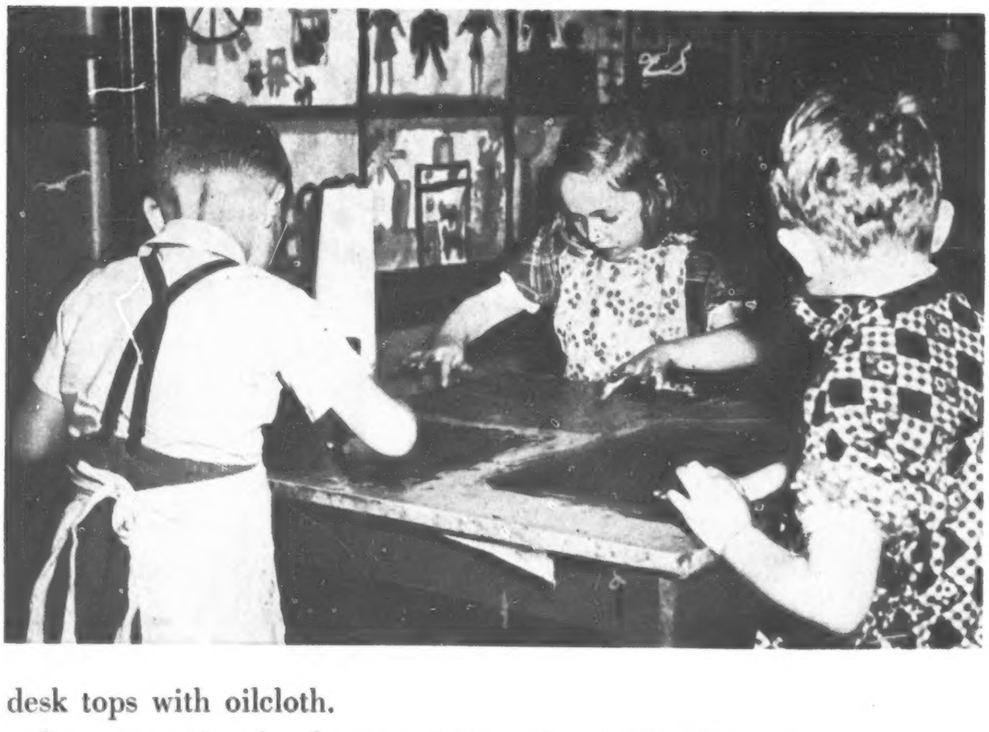
Finger Painting

Finger painting appeals to the very young because it is a direct medium with no intervening tool to control. Usually it will not be used beyond the second year. It may, however, be helpful for children who are emotionally disturbed or manually retarded. The young child will get a great deal of pleasure from the unrestricted physical movement of his fingers, hands, and arms as they glide rhythmically across slippery paint on glazed paper. The patterns that emerge will echo his inner joy in the experience. Variations in his design will increase through further experimentation in using free movement of arms and hands.

The simple activity of finger painting is akin to rhythmic play and has the additional appeal of color. It is advisable, however, for the young child to use only one color at first. Working with several colors on the same paper may be confusing. It may restrict the child's free movement and make the result muddy and therefore disappointing. Even with one color, endless variations of pattern may be created by manipulations and pressures of hands and fingers. The child should choose the color he wishes to use.

So that each child may derive the greatest possible satisfaction from finger painting, the teacher will need to plan the working set-up. If needed materials and equipment are placed in a closet or on shelves within the child's reach, he can learn to take them out, clean up, and put them away in good order.

An oilcloth-covered work table of the proper height is the best working surface, because the child should work in a standing position that permits him to use his arms freely. If a table is not available, a group of desks can be used by folding up the seats and covering the desk tops with oilcloth.



Fingers and hands push, press, and glide

In preparation for finger painting, the child will need to put on an apron and roll up his sleeves well above the elbow. He must prepare the paper by wetting the surface thoroughly. Then he may take a teaspoonful of thick paint and place it in the center of his moist paper. Using one or both hands, he may spread the color evenly across the entire surface of the paper. He is then ready to experiment with the paint.

After helping the child to arrange the materials, the teacher should refrain from giving a further direction or demonstration in the use of paint. She will need only to encourage the pupil by comments such as: "See what happens when you move your arms and fingers in different ways on the paper. . . . Have you tried using the side of your hand? . . . Let's see what else you can do with your fingers and hands."

Finger painting is not recommended for realistic representation. One of the psychological advantages of the process is that it permits the child to obliterate his design with a few sweeping movements and start anew. When the child has made a design he wants to keep, there should be sufficient paper available so that he can experiment further. The child's participation in the activity, his freedom of movement, and his selectivity are actually of more value than the result he achieves. When the child has finished painting, he should be expected to assume his small share of responsibility in cleaning up and putting away materials.

Grades 3-4

Whether or not children have painted in an earlier grade, it is advisable for them to make one or two paintings, using two or three colors and selecting from an assortment of one-inch, one-half inch, and one-quarter inch brushes. This gives children time to familiarize themselves with the routines established by their present teacher. Children should be encouraged to experiment with their colors and to design freely with them. When a child uses a limited number of colors, the teacher is in a better position to evaluate his control of materials and his degree of inventiveness. Most children at this level need to paint only one design painting; a few others may require two or three experiences in order to increase their control of materials. As young imaginations expand and painting skills develop, children may select and use as many colors as they wish.

Discovering new colors through mixing

It is a challenging and exciting experience for the child to experiment with mixing his own colors. Mixing trays and iced-tea spoons should be available. To simplify the process and conserve paints, the teacher may suggest that the child start with a teaspoonful of white paint and add a small amount of pure color. He may then try adding a drop of black paint to a pure color. In further color experiments, the teacher may provide for success by suggesting that the child select two colors from a range of yellow, red, and blue. When two of these primary colors are mixed together, they will produce an additional color.

As the child experiments with color mixing, he is better able to select and combine pure and mixed colors to make his design painting more expressive, varied, and personal. He may use color on color, he may mix colors on the paper, he may discover that he can blend colors while paints are partly wet. The child becomes more inventive in arranging and combining a variety of lines, shapes, and textures.

This is achieved as he considers the placement of the important part, the size and shape required to make his idea clear, and the repetition and contrast of colors to unify the design.

Experimenting with a few colors

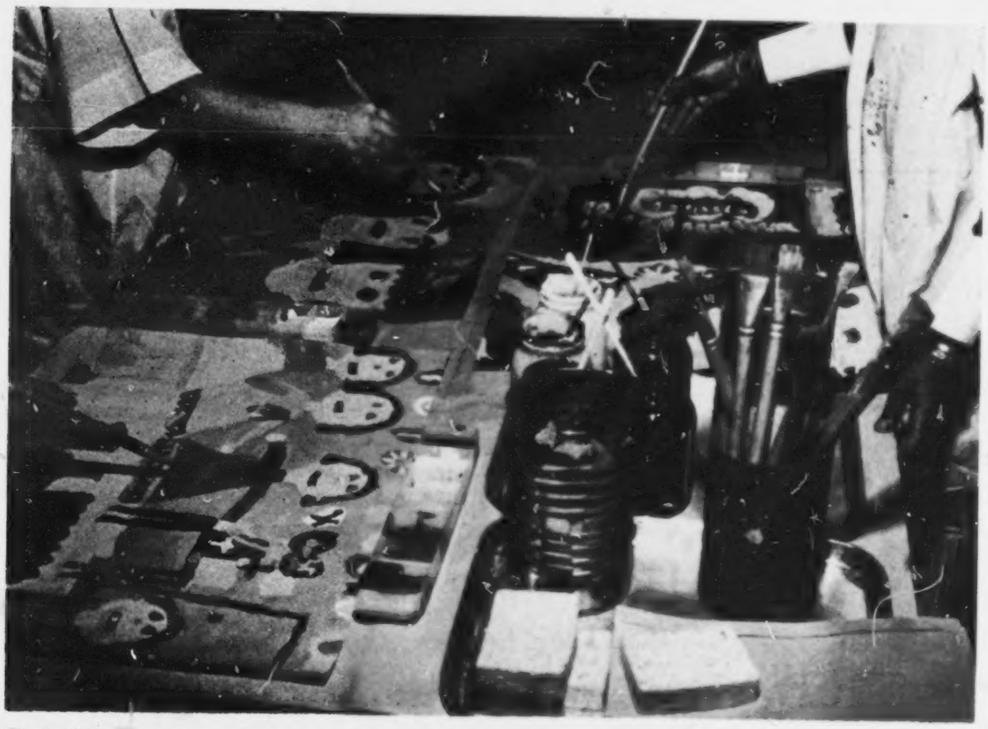
Guidance questions in the design phase of painting may include the following: "Can you create important shapes? . . . Can you repeat colors in your design? . . . Can you experiment in blending partly wet colors on your paper? . . . Can you mix and use more than one shade of a color? . . . Can you help us see the important part of your painting?"

Evaluation continues to be an essential part of each art experience. Typical evaluation questions are as follows: "Which paintings show inventive ways of designing? . . . In which painting is color and design used to make the important part stand out? . . . Where do you see patterned areas? . . . Where do you see strong contrast of colors?"

As the child continues to experiment with color and design arrangements, he may discover that some of the painted shapes suggest familiar or imaginary people or things. He may step back from his work, study it, and discover the part that he wishes to develop. He may add lines, shapes, and details to make his idea clear. Imaginations may be stimulated by the teacher's comments: "The figure you have discovered seems ready for a party. Can you show us where the party will take place? . . . I like the strange creature you have discovered. Can you show us where he lives? . . . What other fanciful things exist in this place?"

The final evaluation may be concerned with the following questions: "In which painting were you able to discover a real or imaginary form? . . . Which paintings have effectively designed background areas? . . . Which paintings show color experiments that carry out the spirit of the discovery?"

Most children of this age will be ready and eager to paint pictures



Painting . . a group set-up

with subject matter related to their current interests, such as special celebrations, trips, and club activities. Thought-provoking questions will stimulate children's thinking and help clarify their ideas. "What did you do in the park? . . . Who was with you? . . . How were you dressed? . . . What else did you see? . . . Was there a place to rest? . . . Did you see a balloon man? . . . Did you see any animals? . . . What were they doing?" Teachers will find that having children close their eyes to try to visualize the pictures they will paint is a useful procedure.

The child is now ready to block in his work with white chalk or tinted water.He considers the placement and size of the important part or parts of his painting He generally starts to paint the principal parts of his painting. Then he develops the background areas by selecting and using colors that will bring out the painting's most important features. He works to distribute and balance colors over the whole paper area. He experiments with brush strokes and color mixing to give greater individuality to his painting. During the working period, the teacher guides the child to solve his problems in a creative way and encourages him to work at his full capacity. The child is asked questions to help him recall art concepts developed in previous experiences.

When paintings are displayed for evaluation, a lively discussion will help the child enrich his understanding of the functions of color and design. The following questions may be discussed in a group evaluation. "Which paintings express an idea clearly and dramatically? . . . Which paintings show an unusual interpretation of a subject? . . . Which paintings do you like best and why?" After several painting experiences, it is advisable that the teacher, together with each child, study a series of his paintings. His growth in ability to express ideas in a creative way will build confidence within the child and help him toward further accomplishment.

Grades 5-6

An opportunity to discover what can be done with a wide bristle brush is as important for the fifth and sixth-grade child as it is for the younger child. Maturity and previous experience are more important than grade level in determining the number of colors a child should use in his initial painting. A well-organized painting set-up will enable most children to begin experimenting with a full range of colors and a variety of brushes: one inch, one-half inch, one-quarter inch, and an ox hair brush. Some children may require additional time for experimentation with colors in order to develop inventiveness in organizing designed lines and shapes.

As children mix color with color, they may be encouraged to work in a variety of ways. Colors may be run into one another to suggest floating shapes; colors may be mixed directly on the paper; and colors may be used over other colors to create patterned and textured effects. As the children work, the teacher may ask, "How do these colors make you feel? . . . What ideas are suggested by your lines and shapes?"

Children may be further encouraged to use brush strokes and colors in a variety of ways. "How can you suggest a dark, mysterious area? . . . Can you use your brush and color to paint a bright and powerful shape?"

In these grades, paintings should reveal more thoughtful organization, more varied ways of using the brush, and better judgment in selecting, mixing, and combining colors. Evaluation questions will provide a helpful background of information that may be used in subsequent painting experiences. "Where do you see unusual, mixed colors? . . . In which painting is color used to express a particular mood? . . . Where do you see particularly interesting and inventive shapes?"

Discovery

As a design painting is in progress, one child may discover that certain shapes bear resemblance to familiar or imaginary people or things. Another child may be encouraged to step back from his painting, study it from all sides, turn it around or even upside down, then select the shape or lines that suggest something definite to him. For example, he might discover a shape that looks like an elephant's trunk. He might then plan the shape of its body and add legs, ears, and tusks to complete it. The elephant can perform in a circus, be viewed behind bars in a zoo, or move freely in a jungle. Other shapes may be added to carry out the setting appropriate for the particular "discovery."

Evaluation will continue to focus the child's attention on all previous art learnings. The following questions may motivate discussion. "In which paintings have discoveries been made? . . . Does the discovery seem to fit in with the design of the background? . . . In which paintings do you feel the mood or spirit of the discovery?"

Story-Telling Painting

At this level the child is generally concerned with realism. Story-telling paintings require specific motivation. The teacher stimulates the child's thinking and rouses it to a pitch of excitement sufficient to energize the child to express his ideas and feelings. Teachers may use the following motivating situations: discussion of the unusual aspects of daily events; dramatization of personal experience; or reading of stories or poems related to the child's interests. When the child wishes to paint a group activity, stimulating questions will clarify his thinking. "Where do we see crowds? . . . Where are they going to be in your painting? . . . What part of your painting will you make most important? . . . Will you show yourself in your painting? . . . How many people will be there? . . . What will they be doing? . . . Will there be people in front of you or in the background? . . . What things will be far away? . . . How can you use color to express distance?"

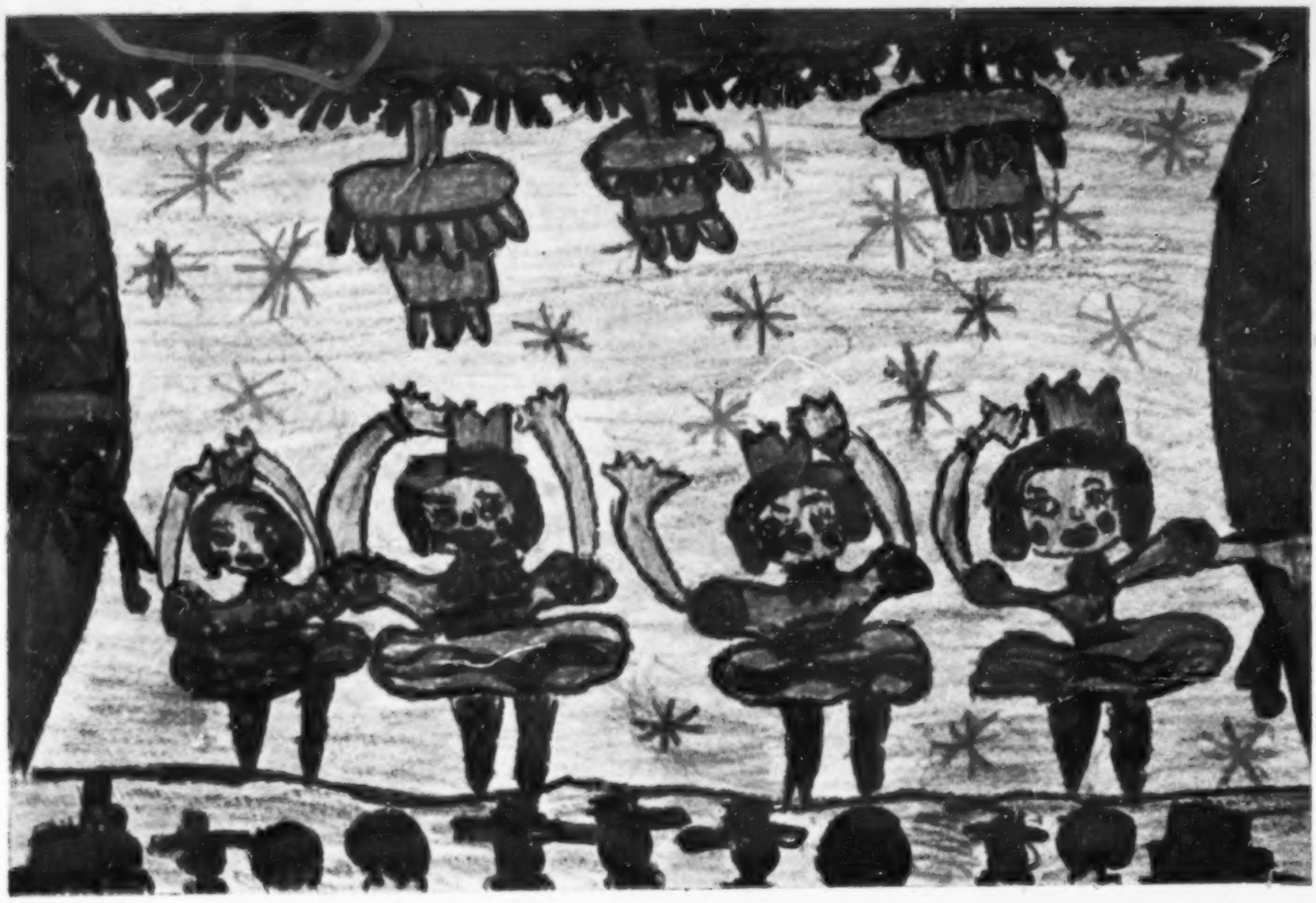
Children are now ready to plan the main lines and shapes with chalk or with a thin wash of light color. The result should not be a detailed picture but rather, simple enough to allow the child to make changes and adjust details as the work proceeds. Through leading questions the teacher continues to help the child consider the design of the whole painting and to select the colors that will make his idea clear.

An evaluation during the working period and then a final evaluation will reinforce previous art learnings and assist the child in his future efforts. "In which painting is the idea expressed with freedom and imagination? . . . In which painting has color been used effectively to bring out overlapped shapes and to show the effect of distance?"

Painting story-telling pictures

The creative teacher will take advantage of this discussion period to honor differences in expression and to encourage the child in furthering experimentation in his art work.

The child inspired through art finds a happier world



CHAPTER TWO

Drawing

Wherever children play, indoors or out, drawings remain to testify to their instinctive desire to communicate. A child draws as instinctively as his early ancestor, the caveman, did when he made his cave and rock drawings. For him, a piece of chalk or crayon furnishes a graphic tool for communication which is often more expressive and informative than spoken words. The child's hopes, fears, joys, sorrows, likes, and dislikes are all revealed through forthright, honest expression. His drawings also reflect the quality of his imagery, his power of observation, and his emotional involvement with the idea he is expressing.

The child reveals in his drawings his own world and his personal relation to it. In his early work he draws himself and his immediate environment. As he grows, the child's relation to his world changes. The teacher can guide this growth by questioning him about what he has seen and done. This will lead to more sensitive observation by the child of people and places. Observing the characteristics of people, places, and things will help him express his ideas more clearly.

Recency of events and vividness of recall serve to intensify the ideas and the emotions a child may wish to express. The teacher's role is to help him develop his ability to express through drawings the ideas he has in mind.

The child's drawings reveal his unique individuality. The nature of the lines he draws, whether they are timid or bold, hesitant or direct, gives clues to his personality. The content and organization of his pictures, the colors he selects and combines, all reveal the child's inner self. Signs of progress and maturity, as well as signs of emotional disturbance, can be noted by the observant teacher.

The stages of growth in drawing, from early scribbling through schematic to more realistic expression, indicate the path of progress along which the child may be guided to move. In this manual, the stages that are generally typical of each grade level are explained in the suggested experiences for that level. The child's ability to draw, however, may not correspond to his grade placement. As the child begins to observe more closely, his ideas may become too complicated for him to express. He may then revert temporarily to an earlier stage of expression in which he feels greater confidence. When his ability in graphic expression catches up to his ideas, he will again move forward. In drawing, as in other art abilities, he may not progress at an even rate. The sequential stages of drawing may be found on page 43.

Materials

Kindergarten: Thick crayons, a set of eight colors for each child; colored chalk, 4" x 1", a box of 37 pieces for each class; 9" x 12" Manila paper; newsprint, approximately 9" x 12".

Grades 1—6: crayons, eight to twelve colors for each child; colored chalks, a box of twelve colors for each child; Cray-pas, a set of sixteen colors for each child; felt-nib pens, one dozen per class; Manila paper, 9" x 12" and 12" x 18"; bogus paper; white drawing paper; construction paper; envelopes or folders of wrapping paper.

Classroom Management

If materials are organized into groups that correspond to the seating arrangement of the class, they can be distributed and collected easily and quickly by monitors. It is desirable for each child to have an assortment of crayons readily available. Some children may have their own. In other cases the teacher should arrange for efficient distribution of the school supply. Crayons may be kept in individual clear plastic bags or in boxes that are labeled with the child's name and group. Since Cray-pas and chalks are more fragile than crayons, it is advisable to keep them in their original boxes.

Individual drawings may be stored in envelopes or improvised folders labeled with the child's name and group. Unfinished work may be kept in the child's desk so that he may complete it when he has time.

When using chalk, the child can avoid blurring the colors with his hand or sleeve by taping his paper, at eye-level, to the blackboard. If he is drawing at his desk or at a table he can use newspaper to protect his work. The teacher may place finished pictures in folded newspapers to prevent their blurring when stored. Since soft chalks are likely to soil hands, the child should wash before undertaking other work. If there is no sink in the room, dampened paper towels should be provided.

Chalk drawing can be done at the blackboard

Drawing may range from an individual activity to a group or class lesson. During the time allotted to art activities, some children may be drawing while others are painting or doing craft work.

Teaching Procedures

The teacher's role in the development of creative drawing is to reach and build upon the latent power and ability in the child. Through the teacher's enthusiasm, encouragement, and guidance, the child is freed to use his inner resources for creative expression.

Motivation

When children have passed the scribble stage, all drawing lessons will need to be motivated. Before children are ready to express their ideas in pictorial form, attention must be focused on the subject, the child's knowledge of it refreshed by discussion, questioning, and, possibly, dramatization. The child's immediate experiences provide desirable subjects for pictorial expression because they are generally vivid and clear in his mind. Imaginary subjects and familiar stories and rhymes also suggest many possibilities for personal interpretation. In order to encourage originality and to offset any attempt to duplicate pictures seen in books or elsewhere, it would be well for the teacher to guide the child to draw a part of the story or poem that has not been illustrated. The teacher who arouses visual curiosity, encourages thoughtful observation, and stimulates personal reactions enables the child to draw in his own personal way.

Guidance

Continued guidance throughout the working period is essential to enable the child to convert his feelings and ideas into pictorial form and to organize them in a pleasing arrangement. When the child has made a decision about what he is going to draw, the teacher will usually need to guide his planning. She may ask problem-solving questions to which no verbal answer will be necessary. Questions and suggestions, rather than demonstrations and formulas, promote individual expression: "Who will be in your picture? . . . What will they be doing? . . . What is most important in your idea? . . . How will you make it important? . . . Are you considering the entire area of your paper? . . . What other ideas can you add to make your story clear?" The teacher's questioning leads the child to achieve emphasis through size, color, and placement.

In discussion, a child will often show that he has many original ideas about a subject yet he may fail to use his ideas in his drawing. He may even say that his picture is finished when he has drawn only a few elements to express his idea. The teacher can help him enrich his drawing by asking questions. "What else will you put in your picture? . . . Where will you place these other things? . . . Will you make them big or little?"

When the child is beginning to use color in areas of his picture, the teacher may encourage him to experiment with crayons, Craypas, or chalk to discover how to use the broad side of short pieces as well as the ends. The child will discover that heavy or light pressure will affect the quality of color. Continued experimentation will enable him to use color on color, thus achieving more varied hues as well as dark and light values.

The child should be encouraged to use crayons and chalks imaginatively, and to make the most of the jewel-like quality of their colors. The teacher may help him recall experiences with design painting and pictorial painting. Learnings acquired through the painting program will continue to enrich the child's drawings.

When the child's ability to observe outstrips his ability to draw, and he seeks ways to improve his work, he may say, "I don't know how to make this boy look as if he were seated." Directing attention to the profile view of a seated classmate, the teacher may then say, "Are you taller when you sit or when you stand? . . . With your finger in the air, follow the action line of the figure from head to foot . . . Where does the figure bend? . . . In what direction does the head turn? . . . Where do the feet point? . . . How much of the chair can you see? . . . Show me these things in your drawing."

Evaluation

Evaluation of the child's work, both while he is drawing and when he has finished, helps him to progress. Individual and group evaluations direct the child's attention toward clarification of ideas. The teacher may frame her questions on the following criteria:

> ability of the child to sense the feeling or spirit of a particular subject and to manipulate the medium to express it

use of drawing media in a personal way

consideration of the relative importance of a given shape to other shapes and to the size of the paper

distribution of color areas to give a balanced feeling to the composition

the sense of "oneness" within a picture (achieved through the use of devices which serve as connectors, such as overlapped shapes or the movement of lines from one shape to another)

development of a focal point in a composition through size, color, and placement of shapes.

Finding Evidences of Growth

Looking over a series of his own drawings can be an active learning experience for every child. He may arrange his pictures from early to more recent ones and in so doing, he may see the progress he has made. Often a child progresses so gradually that he does not become aware of it until he sees the differences to be found between his latest drawings and those he made perhaps two months ago. He may also choose from among his drawings the one or two that he thinks represents his best work. To help him recognize some elements in his growth, the teacher might ask such questions as: "In which drawing do the colors help to tell the story best? . . . In which one do the figures show the action you wanted to express? . . . Which one shows some people nearer than others? . . . What tells you they are nearer?"

To encourage the progress of a child whose development in the use of color for expressive purposes is limited, whose sensitivity to design is weak, or whose imagination has not been sufficiently aroused, it is wise to look through a series of drawings with him. The teacher, in praising his efforts, might ask, "In which pictures have you shown that you know how to make your colors lighter and darker? . . . Can you think of other ways to make a color lighter or darker? . . . What happens when you mix black with a color? . . . When you use white over a color? . . . When you increase the pressure on the crayon as you work?"

This kind of evaluation, in which no comparison is made between one child's work and that of another, will help an uncertain child maintain his self-confidence while being encouraged to progress.

If a child's work is on display, and the class makes criticisms or comparisons, the teacher must handle the situation so that respect for individual ideas and feelings is engendered. This is important in maintaining a child's self-respect and in keeping avenues open for uninhibited creative expression. A display of the work of many children, without comment, often serves to let individuals see the varied ways of picturing the same situation.

When a teacher sees that a pupil has made unusual progress, she may arrange for a series of his pictures to be displayed. This should be done only if the child agrees to the plan and will not be embarrassed by it. Such an exhibition will have value for the class and for the individual. One teacher proved this in dealing with a boy who was losing confidence in himself and, as a result, lacked interest in his art work. When she saw that, over a period of time, he had improved his skill in expression, she displayed all his work to show how he had progressed. When he compared his later drawings with his early ones and realized that he had grown in his ability to express ideas, to plan the arrangement, and to use color to express his feelings, his interest was renewed.

Suggested Experiences

Grades K – 2

While the young child is learning to experiment with paint and a broad brush he may also be learning to express himself with a more easily controlled medium, such as crayon, Cray-pas, or colored chalk. As he paints he finds that a fluid medium can be easily used to make large, simple shapes; as he draws he finds that crayons or chalks allow him to tell a story in a different way.

Scribbling is the very young child's natural way of using crayon or chalk. At first his movements are uncontrolled, but as his muscular coordination develops, he tends to repeat, progressing from scribbled lines that are vertical and horizontal to those that are spiral in formation. He then often tells a story about his scribbles or names them. These later develop into circular shapes from which his first symbols begin to emerge. The child's symbols represent objects as he knows them, rather than as he sees them. He exaggerates the size of objects or omits details, depending on their importance to him at the time. He uses color with little regard for realism and is not concerned about relative sizes or proportions.

During the scribbling and early symbolic stages, the young child draws lines or isolated objects that he scatters at random over part of the paper or over its entire area. Later on, when he identifies himself with his environment, he shows the relationships of objects by drawing them, one next to the other, along the bottom edge of the paper or on a single base line.

As the child's environment broadens and he becomes more aware of things around him, he begins to organize his ideas in other ways. He frequently places some objects above others on his paper and sometimes places them on a second base line. To show what he knows to be going on both inside and outside of a bus, train, or building, he often draws "x-ray" pictures. He usually draws freely and directly, without an over-all plan.

The teacher's role in the development of the young child's creative drawing begins with stimulating motivation, continues through sympathetic guidance, and terminates with some evaluation.

During the early stages of scribbling, it is not necessary for the teacher to suggest topics as the child needs little or no motivation. He derives satisfaction from the physical experience of moving the medium across the paper rather than from the visual result of his activity. Later on, when he begins to draw recognizable subject matter, imaginative themes and familiar happenings that have made a strong impression on the child are usually the best subjects for original expression. But each child should make his own decision about what to draw. When children have passed the scribble stage, ideas and subject matter should be motivated through questioning and discussion. The subjects that the children illustrate during drawing lessons will vary with their interests. At times, there may be a variety of subjects chosen by individual children. At other times all the children in the drawing group will want to work with a common subject. Familiar experiences that provide for individual interpretation offer the most direct motivation. ("My family"; "Holidays are fun"; "The fire engine at the fire.") Make-believe world and similar themes will often appeal to children at this age. The child's imagination also lends itself readily to individual expression of storybook subjects, such as "I saw Cinderella at the ball"; "The world that Jack found at the top of the beanstalk." In order to develop original, childlike ideas and to offset the desire to copy a picture seen in books, the teacher can guide children to select a part of the story or poem that is not illustrated.

Most children in the kindergarten and many in the first year are not at all concerned about the actual appearance of things. When a child has a definite idea that he wants to express in drawing, the teacher can help him to clarify his thinking. For example, a child wanted to make a picture showing her visit to the children's zoo. The teacher asked the following questions to help the child recall the experience and select the most important impression: "What animal did you like best in the children's zoo? . . . Did you feed him? . . . Show us how you fed him . . . Can you show us how big the animal was?" Janet started to draw and in a typical childlike way she made a baby lamb and a figure representing herself, on the lower edge of the paper. To further stimulate and guide her, the teacher asked: "Where was the little lamb when you saw it, Janet? . . . Who was there with you?" Janet thought a bit and finally she drew some more animals, and her father, her brother, and some other people. These ideas had been dormant and needed only to be activated to help the child make a more personal and vivid interpretation of her experience. In using this kind of guidance in the lower grades, however, the teacher will need to avoid overemphasis on realistic expression. The personal color choice and the child's individual way of expressing feelings and ideas are more important than accuracy in representing the real appearance of things.

Only a few young children may be interested in realistic representation. Imagery may be utilized and developed by encouraging children to draw and use their colors in original ways.

Evaluation plays a vital part in the teaching process. In order to focus attention upon the learnings of a particular lesson, the teacher should guide children to evaluate their drawings. If they tend to criticize or to make unfavorable comparisons, the teacher must handle the situation so that respect for individual ideas and feelings is engendered. Questions, such as the following, will be useful: "Can you see your picture clearly when you stand away from it? . . . Who has used the whole paper for his picture? . . . Find the drawing you like best . . . Why do you like it?" The teacher should look for individual, childlike ideas, expressed with feeling and spontaneity. She should be concerned with the child's success in experimenting with the medium and with his skill in drawing symbols to communicate his ideas to others. The teacher should also look for a developing awareness of simple, fundamental concepts of design and for an effective use of color.

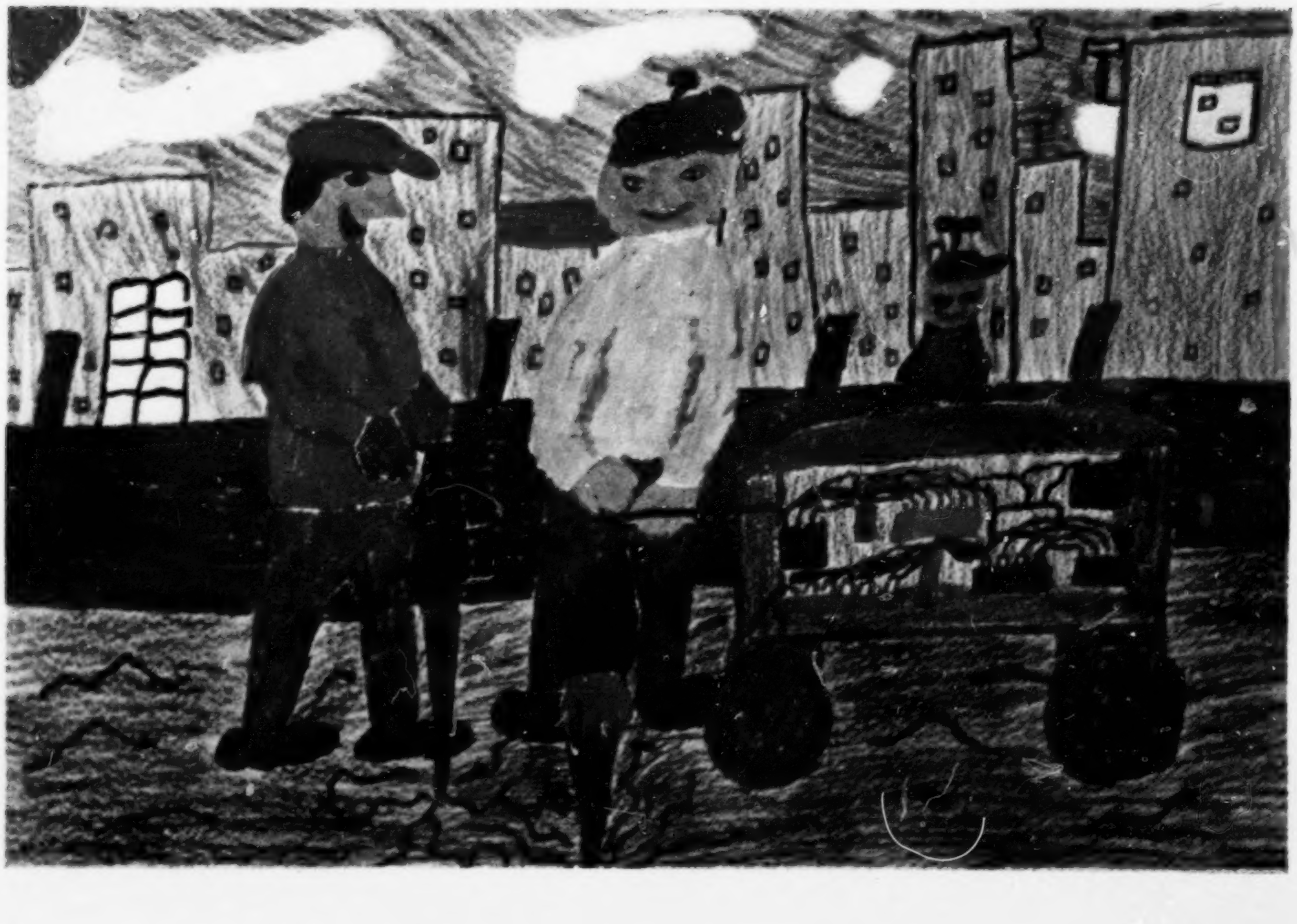
Increased understanding of the growth of child art and a basis for future guidance may be found when the teacher asks herself these questions: "Does the child use his crayon in a controlled or in a haphazard way? . . . Is he able to draw symbols that are recognizable? . . . Is he increasing the number and variety of pictorial elements that he puts into his picture? . . . Are these pictorial elements the product of his own thinking and feeling or are they influenced by those drawn by his classmates? . . . Is he beginning to add details to his simple story-telling symbols? . . . Does he organize his pictorial elements on a base line, on levels, or around a shape? . . . Does his storytelling picture show who is present, what is happening, and where it is happening? . . . Is he becoming better able to plan what will be most important, where ideas will be placed, and how large various parts of his picture will be made?"

Grades 3-4

Children of this age level are eager to express ideas and feelings through drawing. Increased powers of observation, greater manipulative skill, and a background of experience in creative art bring clarity, variety, and richness to their pictorial expression.

As the teacher stimulates visual curiosity and sensory awareness, the child gradually improves in his ability to observe and to retain the many interesting and meaningful things to be discovered in his world. The child's increased observation is reflected in his concern with realism. A concern with reality sometimes restricts spontaneous expression. Therefore it is important that the imagination, humor, and emotional reactions that appear, without self-consciousness, in the work of the young child be encouraged. The teacher should look for a direct childlike approach to a subject as well as for increasing skill that enables the child to reproduce visual appearances more effectively.

Shared experiences or topics of common interest that provide for individual interpretation, offer the best motivation for drawing. Other topics may be suggested by fairy tales, imaginative stories, or the child's own world of make-believe. The world of fantasy keeps young



imaginations alive and encourages individual interpretation. "I was the first boy to explore the ocean floor . . . I am the first girl to land on the moon." Similar topics may readily be thought of by children. Here free expression is encouraged and the need for accurate representation eliminated, since the fanciful experience is not concerned with reality.

Drawing a chosen subject

The third or fourth-grade child may also wish to illustrate subject matter drawn from social studies, language arts, or other curriculum areas. At this time a rich background of knowledge is essential and must be established before the child beings to draw. Information may be gained from personal experience, reading, television, films, or a trip. A variety of experiences can clarify a remote situation and give the child a background of information from which he may select the particular knowledge needed to make his illustration a personal interpretation of a chosen event. Pictures may be used if illustrations showing many views of a chosen subject are available. Children should be guided to look for the characteristics and details of dress, architecture, transportation, and traditional occupations. Illustrative material must always be put away before the child begins to plan a drawing. This precaution will help to avoid the production of hackneyed or remembered illustrations. When a unit on "How the Dutch lived in New Amsterdam" is well under way, a child may use his new learnings to illustrate topics. ("I walked through the streets of New Amsterdam . . . I watched the village boys play games.") The child's ideas are focused through questions, such as: "How did the people travel? . . . How did Dutch homes differ from our homes? . . . How did some of the Dutch settlers earn their living? . . . How did the Dutch settlers dress?" The more a child knows, the more carefully he may select the details appropriate for his particular view of New

Children find that drawing is fascinating

Amsterdam. The linear nature of the drawing media enables the child to illustrate in detail the buckled shoes, the ship's rigging, or the cobblestone street.

After the child has selected the particular aspect of the topic that he wishes to illustrate, he is guided to plan his composition. "What do you want to make important? . . . Where will you place your important idea? . . . How big will you make it?" Third-grade children may decide where to place the most important elements of the picture and then proceed to work directly, with no preplanned outline for the complete idea. Fourth graders may sketch with white chalk or light crayon to pre-plan the main ideas and composition of the picture. Pencil is not desirable for preliminary sketching since, in the hands of the young child, it tends to make a rigid, mechanical line that lacks the flowing, ever-changing quality characteristic of crayons or chalk.

When a child's drawing shows near and far elements, the attention of the class may be directed to this new learning. "Which figures or objects are near? . . . Which are far away?" Guided observation leads children to see that distant people and things may be drawn smaller and placed higher on the paper. When drawing groups of people or things, the following questions may help to clarify the child's image. "Look at the children waiting for the bus. Can you see the complete shape of each figure? . . . Why not? . . . Can you see the complete outline of each car on a busy street? . . . How can you show a figure in front of a car? . . . How can you show that a building is behind the car? . . . Can you see the entire building? . . . Why not?"

As a result of such questioning, many children may now consciously overlap some figures and objects, placing them in front of or behind one another. As the third or fourth-grader draws, he may discover new ways to use his medium. "Look about the room . . . Where do you see dark colors? . . . Where do you see light colors? . . . How can you make colors light or dark? . . . Can you use color on color? . . . What new colors can you discover?"

The following questions may stimulate the child to invent surface patterns: "Look at the clothing of your classmates . . . Where do you see patterned areas? . . . Would you like to use some pattern in your drawing?" Stimulated by questioning, the child will also discover ways to suggest textural qualities, such as rough or smooth ground, smooth or furry hair. "Is the road you have drawn smooth or rough? . . . How can you use your crayons to suggest a rough surface? . . . How could you make a bear look furry?"

Learnings from design painting experiments may be recalled and applied to illustrative drawing. A few questions by the teacher may motivate children who are drawing to express a mood or feeling: "What colors will you use to show that you are imagining something very sad or very gay or very frightening?" Questioning also helps children use colors imaginatively. "Does the sidewalk always have to be gray? . . . the grass green? . . . the sky blue? You can choose the colors that are "just right" for your picture, can't you?" The teacher points out and praises imaginative color choices.

In evaluating their drawings, third or fourth-grade children might look for those that show overlapping objects, near and far objects, inventive patterns, interesting textures, and increased sensitivity to color. When several drawings are being evaluated, children may be asked: "In which picture are boys and girls standing closest together? . . . How can you tell which objects are near and which are farther away? . . . Where you can find a patterned area that contrasts with a plain one? . . . Where do you see a rough texture? . . . What colors stand out clearly? . . . Why? . . . Where do you see a mixed color? . . . How do you think Johnny made this color?"

When evaluating pictures that illustrate the learnings of other curriculum areas, such as social studies or language arts, the child is asked to consider art values as well as subject matter. If the drawings to be evaluated show fantasy, the child may be directed to look for unusual or unreal color effects. He may see a place or a figure that never existed before a young imagination created it.

Art learnings explored through discussion and questioning may be accepted or rejected by the child depending upon his needs and level of maturity. A third-grade child may show rigid figures along a base line with no overlapping of these forms against a background. The teacher who is familiar with the entire developmental growth pattern will recognize that this organization is typical of work done in an earlier grade. She will guide the child to develop from this present stage to the next step in the path that leads from kindergarten through grade six.

The quality of child art is not restricted by growth levels. The needs of the individual child and his readiness to progress are more important than age or grade level achievement. Creative work that preserves the honest, forthright expression of the individual child has true beauty and art value which cannot be placed on any scale of achievement.

Grades 5-6

When teaching in the lower grades has been consistent, fifth and sixth graders should be able to express their ideas with competence and self-assurance. In every class group, however, there will be pupils of different levels of ability and with wide variances of personal experience. This will affect the individuality and quality of each child's expression.

A child's idea of a particular subject may require a rendering with fine details. If so, he will find that wax crayons or Cray-Pas are more suitable than either paint or colored chalk. Since the child may have been using the former media frequently during his earlier school years, the teacher can renew his interest by encouraging experimentation. The child may discover how to mix unusual colors and how to mingle colors to achieve textured effects. He may suggest the solidity and form of objects through the application of color over color. He may vary color to achieve a greater effect of near and far relationships. The child at these grade levels will make use of previously acquired art learnings, such as the need for color contrast, the use of color for balance, repetition, and emphasis. Motivated by his growing power of observation, the child will generally attempt to draw things realistically. This interest will lead him to observe and indicate the effect of distance on the appearance of objects and to make clear the visible parts of overlapped forms by the use of contrast in lightness, darkness, and color. His increasing sensitivity will enable him to suggest the mood or spirit of a situation through the use of line, shape, and color.

When the child makes his own interpretation of a topic to be illustrated, the vividness of a personal reaction will give impetus to

Personal experiences stimulate creative expression his thinking and originality to his expression. The more personal experiences, such as everyday activities, group games, and unusual happenings, stimulate creative pictorial expression. Jerry, whose father took him to visit the airport on Sunday, and Carol, excited about her first experience on skates, will be eager to picture their adventures. Other children may need some help in deciding upon a theme because their everyday activities do not seem important to them. The teacher, through judicious discussion, may lead them to see that they can make expressive paintings of such seemingly ordinary subjects as "Helping at Home", "Marketing", "A Club Meeting", or "My Young Brother and His Friends at the Playground."

Looking at a film or reading a poem with vivid word pictures are also ways to encourage expression. At times it is interesting to have the entire class select a single topic that allows for a variety of interpretations. A recent trip to the museum by the class is an example of such a topic, because of the variety of experiences in which all have participated. Some children may be interested in a single incident and emphasize details, while others may be concerned with a wider scene. One child may recall how he walked with his classmates and teacher past his own house and waved to his mother at the window. That will suggest a personal kind of picture. The unexpected meeting with a friend in a bus may give an idea to another, while some may remember the colorful array of magazines on the street newsstand and the crowd of people standing nearby. Other children may picture the group looking at an exhibition in the museum or having lunch beside the lake.

Such common topics as games, school sports, shopping, travelling, neighborhood situations, club and church activities can be used to motivate all children. While these topics are similar to those suggested for the lower grades, older children can be expected to interpret them from a different point of view because of their more varied interests and keener observation.

Thought-provoking questions that bring to consciousness what the children already know about the topic will help them to decide on the specific aspects that they wish to depict. The teacher, for example, may help children plan original ways of picturing a local street by leading them to think how it is different from other streets or how it changes at different times of day. One child may remember the people on the narrow pavement as they push and jostle each other. Another may think of the buildings on the same street, some tall and some low. A third may remember the colorful shop signs and the lights that brighten the streets at night.

When each child has his own idea of what he wishes to express, he is ready to plan his picture. Most of the children will have some experience with preplanning. They can indicate the placing of the main lines and important shapes with a few chalk lines. A pencil should not be used for preliminary planning because it is too fine a tool and restricts the child to a detailed kind of drawing. This first step is called "blocking in" a sketch. It should be simple enough so that children feel free to change and adjust as they proceed. The teacher should encourage each one to plan and carry out his picture in his own way and, through leading questions, help the child to consider the design of the whole drawing and the colors he may use to make his idea clear. The teacher does not do any drawing for the child, nor suggest devices such as stick or sausage figures. Mechanical devices, as well as memorized rules, place emphasis on the product and deny the child the opportunity to observe and to work out the problem for himself.

If a child is having difficulty in representing figures in a picture, the teacher may suggest that he himself try dramatizing the action in order to feel the movement within his own body or that other children take the desired poses so that important action lines may be observed. The child should, however, do the actual drawing from memory. Drawing from the model, with its multiplicity of detail, is too complicated for these children. In drawing from memory the child will emphasize the things that have impressed him.

A child often includes animals in his pictures but is not satisfied with his drawing of them. Thinking of the most descriptive term to characterize an animal, such as a slinking cat, a running horse, a jumping dog, will evoke a clearer visual image. Sometimes a contrast of descriptive terms may help him. The children may talk about the bulky, slow-moving elephant with its heavy legs and lumbering gait, in contrast with the swift-running deer with its slim body and long, slender legs.

Over a period of time, a fifth-grade boy made many drawings and paintings of horses. His interest in his subject stemmed from the fact that his father was a mounted traffic policeman. The boy continually showed horses in the same position, with little variation in the brown he used for the animal or the green for the grass. He was not satisfied with his work although he did not know why. His teacher advised him to think out a solution for himself, building upon what he already knew about horses. With great pride he had often spoken about his father directing traffic or leading a parade. The teacher asked him to recall the different positions in which he had seen his father's horse, as it pawed the ground, turned with a change of traffic light, or lifted its feet proudly at the head of a procession, and suggested that he picture one of these actions: "See if you can make your horse look alive . . . Try drawing a few very light lines to indicate the action of the body, neck, and legs." These suggestions gave the boy additional ideas which he used in a number of drawings and paintings.

Each time the boy saw his father's horse he observed it very carefully. His teacher saw that his observation helped him to achieve much of the realism he desired, but felt that he could go further: "You know so much about your father's horse. Wouldn't it be fun to show, by the kind of lines and shapes you use, some other kinds of horses: young colts running in the field, circus horses, or big, powerful draft horses?" Having discovered a way to think out problems for

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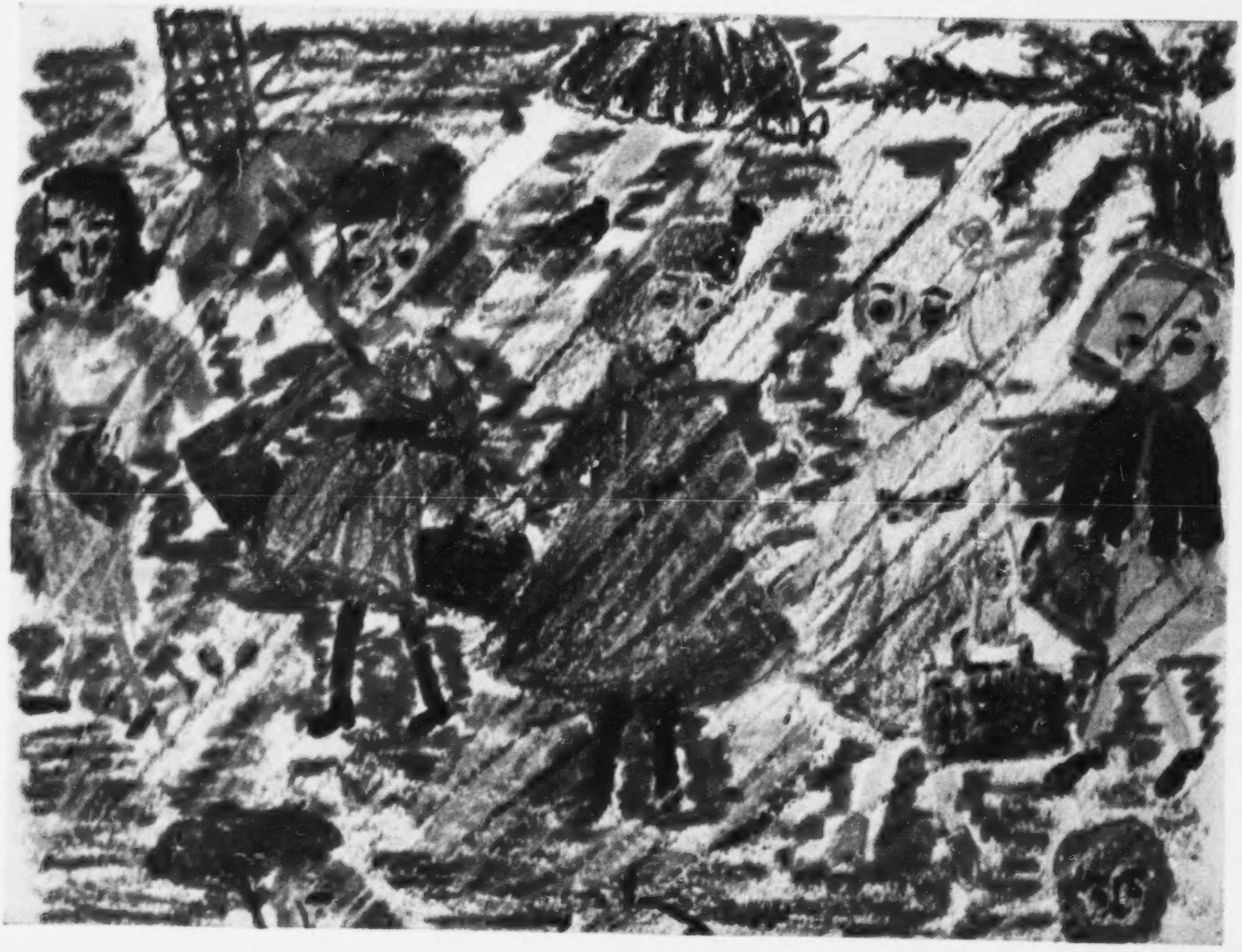


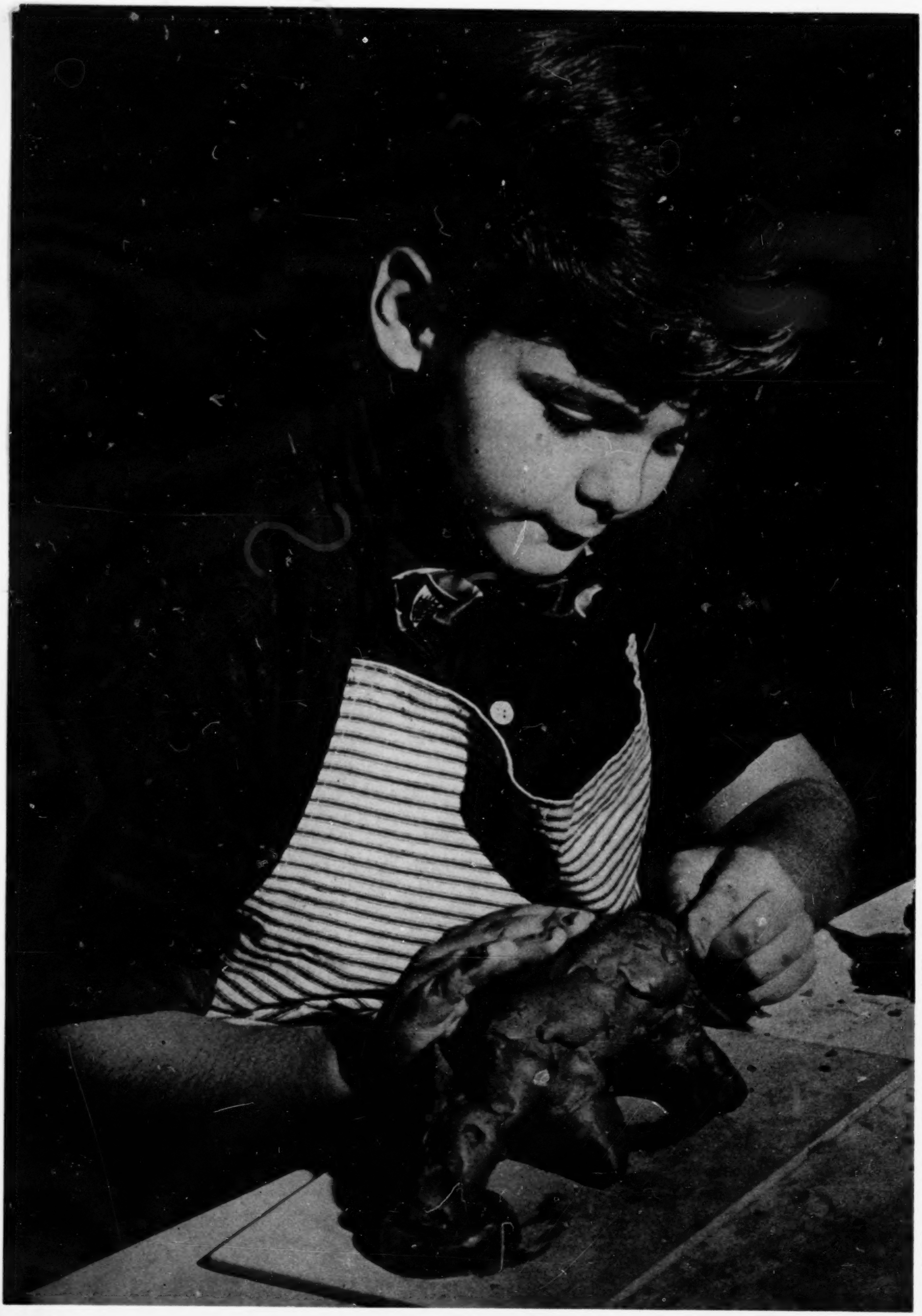
himself, the boy developed confidence. Finally his pictures showed spirited and colorful horses, and good design. He had surprised himself. Other children can similarly call upon their experiences, and with stimulation from the teacher, work with equal satisfaction.

Frequently the teacher will encounter a child who has great facility in representing things realistically, but is not making any progress in improving his art ability because he constantly repeats himself. One teacher wanted to help a child draw in an original rather than in an imitative way. When questioned, the boy admitted that he had repeated the subject of airplanes frequently because he had drawn them so often and it was easy, "at least as long as they are turned sideways". A suggestion from his teacher made him see that he could still use his favorite subject, airplanes, but that he could tell more about the whole situation as well. His teacher said, "Could you show the passengers alighting from the plane? . . . Perhaps it might be interesting to see how the mechanics go about their work . . . Where do the waiting crowds gather at the airport? . . . So many different kinds of interesting things happen in connection with airplanes that it might be fun to see if you could show a series of them in your pictures."

It was hard for the boy to break away from the kind of drawing that always brought the admiration of his classmates. A new and untried venture made him feel insecure. When his teacher praised his first effort in showing his airplane in different positions, he began to gain confidence. His ideas became clearer and his pictures more vital. Further praise and guidance led him to experiment with color and arrangement. Before long the child drew planes rolling out from the factory, planes in flight, planes refueling at the airport. The pictures had life and good design. "You have shown us so much about planes, pilots, and airports, why not tell us about some other things in which you are interested?" said the teacher. The teacher's interest in his work gave the boy the courage to draw other subjects. Gradually all his drawings showed an improved interpretation and design.

The teacher will need to emphasize original thinking and drawing, no matter what curriculum area the topic is drawn from. A copied picture or one unduly influenced by illustrative reference material is not an honest or valid art experience.

Constructive evaluation, either individual or group, should be part of every drawing lesson. The following questions will summarize, for the teacher, the child's progress in drawing: "Is the child's observation becoming keener? . . . Is his sense of the structure of things becoming evident? . . . Can he express movement more effectively through the drawing of people and animals in action? . . . Can he vary color to give an effect of distance? . . . Do the color, line quality, and composition of the picture suggest the spirit or mood of the topic that is illustrated?"



CHAPTER THREE

Modeling With Clay

Clay is a highly desirable medium for the child to use because of its unique possibilities for expression and growth. It is so inviting that a child, when given a lump of it, will immediately begin to shape it with his fingers and hands. The pleasure he derives from squeezing and squashing, smoothing and rolling this pliant material, and the joy that comes from creating something tangible, give great satisfaction and fulfill a definite emotional need.

A child may prefer clay to paint or other art media. Creating in three dimensions offers him an opportunity to work directly and to express his feelings and ideas without the need for mastery of a tool. The process of modeling has a special appeal since it permits constant change. Figures and forms can be added or taken away; they may be changed in position, size, and shape as the child brings movement and life to his work.

Materials and Equipment

Teachers should use the moist, ready-to-use clay on the G-1 Supply List for the children's modeling experiences. Where there is no kiln, a class may use self-hardening "Instant Papier-Mâché" which has many of the modeling qualities of clay. This item may be found on the G-1 Supply List.

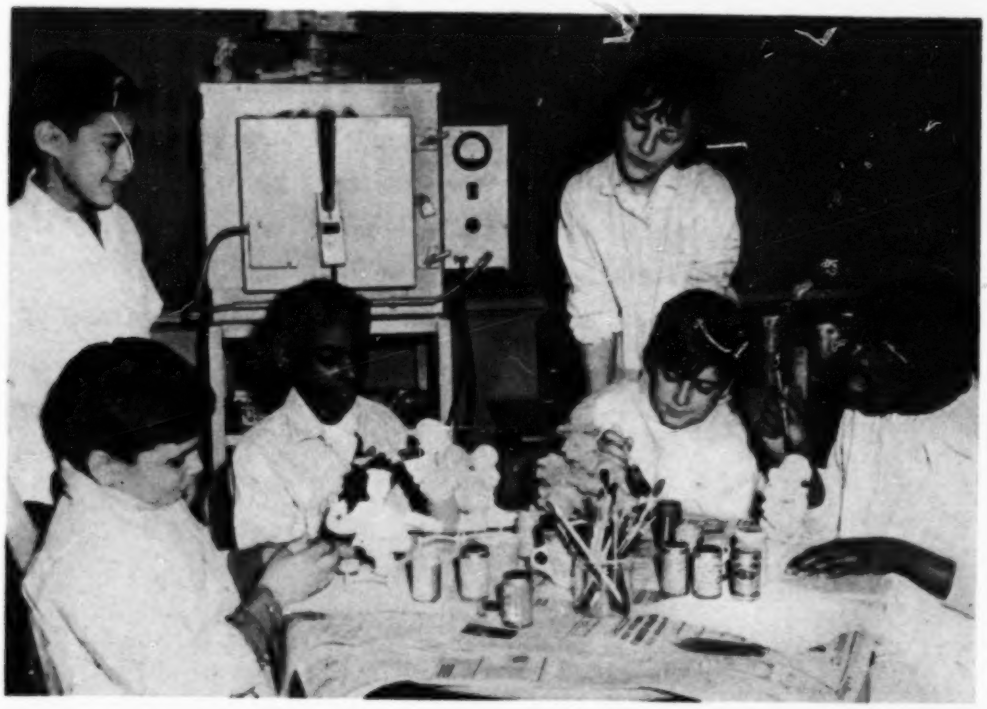
Plasticine, often called modeling clay, is a type of clay mixed with oil and should not be confused with ceramic clay. Plasticine is not recommended for use in kindergarten through grade six because it does not give the same tactile satisfaction as ceramic clay and, in addition, never hardens. A class of thirty will need between forty and fifty pounds of clay for its use and re-use.

Each child should have a lump of clay approximately the size of a small grapefruit, oilcloth, wrapping paper or newspaper to protect his desk, a damp cloth for wiping his hands while working, a damp sponge for cleaning up, and a square of shellacked board, masonite, or linoleum on which to work. The latter material will enable the child to turn his piece around as he models it from every side. Air-tight

Odd little tools produce interesting textures and patterns plastic bags or tin boxes may be used to keep balls of clay or unfinished forms moist.

Hands and fingers are the best modeling tools for young children. Older children may improvise simple tools for more detailed areas where fingers cannot operate so easily, and for creating varied surface treatments. Penholders, sticks, hairpins, and bent wire may all be used successfully. A putty knife or a blunt-tipped kitchen knife is useful for cutting the amount of clay needed for immediate use, for scraping off excess clay, and, when necessary, for removing the finished piece from the working surface.

It is advisable to have two covered containers, such as plastic or galvanized pails, or earthenware crocks, in which to keep clay. Clay balls, conditioned and ready for use, may be stored in one container, while used clay and left-over pieces should be put in the second container to be reconditioned for future use.



Children select the type of glaze suitable for each piece

Glazes

Creative activities with clay are not complete until children have experienced the magic of having one of their pieces fired and glazed. Part of the "mystery" of the process of glazing is that, through firing, glaze is transformed into a glasslike surface with a rich, beautiful color that does not resemble the original color of the clay or the glaze. Glazes in a variety of colors and finishes that require a relatively low firing temperature, 1859 degrees Fahrenheit (cone 06), and are therefore suitable for use in school kilns, can be ordered from the G-1 Supply List. The following types of glazes in both powdered and liquid form are suggested: Single-fire, semi-matte glaze may be applied to dried clay forms, known as "greenware", that have not yet been fired. Opaque and transparent majolica glazes may be applied to clay forms that have been previously fired and are known as "bisque" or "biscuit". Underglaze colors may be applied to greenware or biscuit and are usually used for colorful decoration.

Powdered glazes may be prepared beforehand. These should be mixed with a small amount of water and thoroughly ground in a bowl or mortar, using a spoon or pestle. The mixture should be smooth and have the consistency of cream. Any glaze that is too thick may be thinned by adding a little water and mixing it thoroughly in the mortar with the pestle. Unused glazes may be stored in labeled and covered glass containers.

One teacher in a school should be responsible for glazing materials. In grades K-4, the teacher should mix and apply the glaze while the children observe the process. Fifth and sixth-grade children may be taught how to glaze their own pieces.

It is important that greenware be thoroughly dry before glazing. Biscuit pieces ready for glazing must be submerged in a bowl of water until all air bubbles are expelled. Each piece should be placed on a low prop, preferably a bit smaller in diameter than its base. A small metal foil pastry cup turned upside down is ideal for this purpose. The prop will prevent an accumulation of glaze from building up around the lower rim of the piece and will insure a smoothly covered bottom

Applying three coats of smoothly flowing glaze edge. The creamy glaze is applied evenly with vertical strokes of a glazing brush (on G-1 Supply List) or any soft, flat brush. Glaze should be stirred each time the brush is dipped into the container. A second coating, made with horizontal strokes, should be followed by a third diagonal coating. Care should be taken to prevent any glaze from getting on the base or bottom of the piece. The piece should not be touched during the glazing process since the delicate glaze coating is easily damaged. The object should be left to dry in preparation for firing. Some glazes are toxic, therefore children should be cautioned to wash their hands thoroughly after handling glazing materials.

In early glazing experiences, children should have an opportunity to choose one glaze from a range of colors and textures. Since the unfired glaze gives no clue to its finished appearance, the choice may be made by referring to a set of small trial tiles or previously glazed and fired pieces. A permanent reference collection of glaze colors and textures may be built by glazing and firing greenware and bisque fragments as the clay work progresses. In a later glazing experience the children may be encouraged to use two or more glazes of their own choosing. At times the color and texture of the fired clay is desirable and a minimum of glazing is advisable. For example, terra-cotta pieces may be enhanced by simple touches of a shiny white, majolica glaze or a dull, dark underglaze. Clay figures of people or animals may be enlivened through color and texture of costume or characteristic features. On pottery pieces, a second color or texture may be used for a contrasting lining, an edge, or a designed area. Glazes used in combination should have about the same specified firing heat. Instructions on the package of glaze indicate the degree of firing heat required for maturing.

An electric kiln for firing ceramic clay is considered essential equipment in the modern school. One person in a school should receive instruction in, and be responsible for, the operation of the kiln.

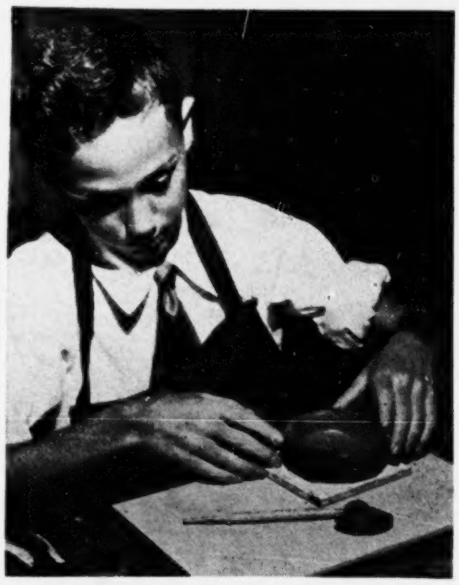
Classroom Management

Most teachers find it best to confine clay-designing activities to one part of the room, seating two to four children at a newspaper-covered table placed on a newspaper or linoleum covered floor. A teacher skilled in this area will be able to manage a fairly large group of children if the facilities and storage area (such as might be found in an art room) are adequate.

Protecting table and floor makes cleaning up easier. The can in which clay is delivered, the covered containers for the left-over clay, a pail of water, and clean-up materials should be conveniently placed for children's use.

If a work table is not available, two or four desks can be used. Children should be taught the clay modeling routines, beginning with covering the desks and ending with cleaning up at the end of working time. They should wear aprons or smocks.

It will facilitate the distribution of clay if lumps about the size of a



Modeling on a non-absorbent surface

small grapefruit are previously dug out of the can with a sturdy trowel, covered with a damp cloth, placed in an air-tight plastic bag, and stored in a large covered container. Two boys in the class, or assistants from upper classes, will be glad to have the assignment of dividing the clay. The condition of the clay is an important factor in successful modeling. Moist clay, delivered in covered cans, is usually in the right condition for use. After the container has been opened, the clay will remain moist indefinitely if a well-dampened cloth or large, wet sponge is placed on the clay, the top of the large plastic bag surrounding it is twisted and closed, and the cover is replaced. The "just right" consistency that the child senses as he works with clay gives him great tactile satisfaction. Very wet clay will not hold its shape and is unpleasant to handle because it sticks to fingers and tools. Exposing clay to the air for a short time will correct this condition. Clay that is too dry cannot be manipulated satisfactorily and will result in poorly constructed pieces of work.

Interesting pieces of work that have not been finished by the end of the working period may be kept moist by wrapping them carefully in a damp cloth or in wet paper toweling, and standing them in air-tight plastic bags or a large can with a tight-fitting cover. A large tin or plastic breadbox may also be used for storing unfinished pieces. Completed work should be placed on a shelf, away from heat or drafts, where it can dry at room temperature. Slow drying is essential to prevent warping and cracking.

It is not necessary to fire all of the objects that have been made by the group, but it is desirable that each child have at least one piece fired during the year. While the teacher follows the directions that come with the kiln, children are able to observe at first hand the way to stack the clay pieces in the kiln and to see the transformation of the clay after it has been fired. They will also become conscious of the importance of having clay well wedged and parts carefully welded to prevent breakage during firing. If a school has no kiln, children's work may be fired at a commercial pottery for a nominal fee.

Restoring Clay

Balls of clay can be restored to the desired consistency by wrapping them in several thicknesses of very wet cloth or by placing them between well-saturated sponges in an air-tight plastic bag.

Clay that is very hard in the original container may be reconditioned by digging deep holes in the dry lump and then pouring water over the clay. The water will seep into the clay through the openings. Clay does not spoil, therefore it should never be discarded, but kept for reconditioning.

Used clay should be placed in a separate container, with enough water added to keep the clay moist. Before it can be used again, this clay must be further prepared by a process called wedging, which expels all air bubbles and gives the clay an even texture throughout. Wedging is especially important in order to avoid having pieces shatter when they are fired in the kiln. Wedging is accomplished by pressing a lump of clay into a compact mass, cutting it in two with a knife or wire, and pounding the two pieces firmly together on a board. One uncut side should always be pounded against the other uncut side. This process is repeated many times until no cracks or air bubbles appear on the cut surfaces when the clay is divided. Wedging may be done by a few competent children before or after the school session.

When a child uses only a part of his clay to start with, he should keep the reserve in a moistened condition under a damp cloth. He should be cautioned that small, detached bits of clay dry very quickly and therefore should immediately be added to his reserve. Unused, dry pieces should be put into the proper container to be softened before being used again.

Creating non-realistic forms encourages experimentation

Teaching Procedures

Following his initial experimentation, the child is given a lump of clay and encouraged to manipulate it into a non-representational form. Through questions, such as the following, he is encouraged to consider the design of the total form. "Do all parts of the clay have to be the same size and shape? . . . Are some parts rough and some parts smooth? . . . How did you make them that way? . . . As you turn your piece around, do you find that you like it from all sides?"

From the earlier phases of random manipulation to the deliberate shaping of forms, children need frequent experiences with clay in order to progress in improving their coordination They learn to vary shapes and to combine them in unified arrangements. These arrangements may have no realistic meaning, but the child gets satisfaction from this ability to organize and control the material. As he turns his work around and looks at it from all sides, he begins to sense the design of forms and the relation of parts to one another. It is not advisable to fire the early experimental pieces.

The ease with which clay forms can be changed and combined leads naturally to further experimenting and exploring. Before long the child may discover that one of his freely manipulated pieces suggests a familiar or an imaginary form. A few provocative questions by the teacher can help the child recall what he knows about the recognized form so that he can clarify it through further modeling. With stimulating motivation and skillful guidance, the child's clay modeling experiences will excite his imagination and stir him to create unusual forms.

The teacher can help the child realize that clay is a bulky material than can be shaped into a sturdy, well-proportioned form. The child will discover that a clay form should have no thin, extending parts; that it should stand without artificial support; and that added pieces must be firmly welded, or joined. He will learn that a clay form should be satisfying in design from all viewing points.

The skillful hands of children can create simple, attractive forms,

Coils are carefully welded to avoid cracks

both realistic and non-realistic. Experimentation with lumps, coils, and slabs of clay, used either alone or in combination, will lead the child to discover ways of constructing imaginative or realistic forms or practical pieces, such as bowls, small vases, or other containers. Since clay is not suitable for fragile types of construction, the child will need guidance in judging the nature of his material in relation to the article he may want to model. A fifth grader carefully made the wheels and all parts of a miniature wagon from flat pieces of clay, only to find that the whole thing collapsed when he attempted to assemble it. Another child spent some time rolling very small clay coils of even thickness and forming them into a pair of eye-glasses. These incidents show lack of guidance in the use of clay. Children can be brought to understand that objects like a chair or a truck can be more appropriately constructed from firm material, such as wood or cardboard, and that, should a pair of eye-glasses be needed for a play or a similar purpose, wire will prove to be a more satisfactory material than clay.

Craftsmanship in handling clay will be improved as the child's background of experiences in modeling is enlarged. He will learn to recognize the qualities of structural balance, pleasing proportion, and movement in design through the use of line and mass. He will become increasingly aware of the necessity for fitness to purpose as well as to material.

For the teacher, the pupil's original product is a gauge of the child's growth in manual, mental, and creative ability. The steps in clay modeling activities will be found on pages 145, 146.

Suggested Experiences

Grades K – 2

The young child may have had fun at the beach building castles and tunnels with sand and water. The delightful experience of piling up mounds of sand, intuitively creating varied forms, and patting them to make the structure firm provides a natural introduction to modeling with clay.

In order to make the child's experiments with clay profitable and enjoyable, the teacher will supervise the necessary preparations suggested in the section devoted to classroom management. As in all art areas, experiments with clay are approached in a creative and exploratory way. The child is provided with a piece of well-conditioned and very pliable clay about the size of a small grapefruit. The clay is placed on a suitable working surface, such as the rough side of oilcloth mat, masonite, or linoleum square. The child will soon discover that clay is a pliable material that can be pressed, poked, rolled, twisted, patted, pinched, pulled, and smoothed. The child is guided to build a clay form that will stand by itself. He may hollow out openings, if he wishes to do so, in order to create light and shadow patterns on the surface of the form. Hands and fingers are the best tools for the young child's first experiences. Later on, a pencil, tongue depressor, or hair pin may be used as a tool to add further interest to some areas of his work. The teacher's enthusiasm will encourage the child to muster all of his inventiveness in creating a sturdy, non-realistic, three-dimensional form. Comments will help: "You have made many interesting shapes with clay . . . Your work looks different from the others, doesn't it? . . . I like the way you built up your clay . . . It is interesting to look at from all sides."

As the child manipulates his clay, he may discover real or imaginary forms. Young imaginations may recognize "make-believe" creatures from the beast, bird, fish, or fowl families. When this occurs, the child is advised to pull out, push in, or add clay to make his idea clearer. Surface treatment, made by using a simple tool, can emphasize a part or parts of the form and also suggest various patterns or textures.

Frequent constructive evaluation during the working period gives the child confidence and encourages him to further experimentation. "Does your clay form look beautiful from all sides? . . . Are you sure that all the parts will hold together? . . . Is your work sturdy? . . . Whose clay work do you like best? . . . Why?"

The child at this level may wish to model figures of his friends, his family, or his pets. He may form his figures from a solid lump of clay or he may add other pieces of clay to it to fashion parts, such as arms and legs. When clay parts are added, the child must be advised to weld them to the main mass of clay so that the parts will be equally solid. Sometimes it may be necessary to use "slip" (clay and water mixed to the consistency of cream). Slip serves as an adhesive to cement parts to the main mass so that the whole form is firm and strong.

Clay is pleasant to feel

The child may experiment with various ways of finishing his clay form. Some areas may be smoothed; others may require a roughened surface treatment. Thinking of the smooth surface of a sleek cat, the rough surface of a shaggy dog, or the various textures of hair and clothing will lead the child into experimenting with those textural effects he thinks would make his modeled piece more effective.

As the child develops the ability to work with clay, he is able to interpret personal ideas in a more expressive manner. His increased skill and inventiveness will add new variety and beauty to his work. At this time the child is usually willing to consider early efforts as experimental and to return the clay to the crock to be reconditioned for further use. The class selects for firing those pieces that are sturdy in design and construction. Each child should have the satisfying and educational experience of having at least one piece of his work fired during the year. See pages 61, 62 for suggestions concerning the use of glazes.

Grades 3-4

Whether or not the child has had previous clay experiences, it is advisable that he start by using the medium experimentally, rather than start by making a preplanned form. The teacher should encourage him to invent simple, compact forms that are satisfying when viewed from all sides. The child may devise openings, or windows of light, to make his experiment more interesting. He may scratch, smooth, roughen, or gouge out the surface of a clay area with an improvised tool, such as a strong hairpin or an orange stick. Learnings recalled from experiences in design painting will help the child realize that plain, patterned, and textured areas provide interesting contrasts of surface treatment.

Guidance through questions and discussion continues as the work progresses. "Does your form stand firmly? . . . Are you sure that all parts are solid? . . . Are there any parts that may break off easily? . . . Have you considered your design from all sides? . . . Have you used varied openings? . . . Are there openings that allow light to come through? . . . Did you use some rough and some smooth areas?" In

Rolling out a slab of clay

evaluating results at the end of the working period, children may look for experiments that show strong forms and light open spaces, straight and curved shapes, plain and textured areas.

Designing with Slabs of Clay

Through experimentation the child discovers that he may pat and flatten clay into slabs of even thickness. A thickness of one-half inch or more is advised. A simple device can be made of two strips of wood, approximately 12″ long and ½″ high, that are placed on a working surface to act as a gauge that will insure a clay slab of even thickness. A dowel rod or a glass jar may be used as an improvised rolling pin to smooth and flatten the slab. The teacher should remind the child that the distance between the wooden strips should be less than the length of the dowel rod or rolling pin. A small amount of powdered clay sprinkled on the working surface prevents the clay slab from sticking to it. A lump of clay is placed on the working surface between the two wooden strips and rolled flat. The slab is then in readiness for experimentation. This slab should be a little stiffer than that used when working directly with a lump of clay. If the clay slab is too moist it will sag; if too dry it will crack. A freely constructed abstract shape may be designed from a slab of clay. Designing with a slab form placed, to some extent, in an upright position, rather than flat on a working surface, offers additional opportunities for an ingenious solution to problems related to the balance of masses. The slab may be cut with a blunt knife into a single desired shape or it may be divided into two or three shapes. Shapes may be slit, twisted, coiled, rolled, pierced, and combined in various ways.

As the child works, the teacher stimulates him to further inventiveness. "Were you able to build upright forms with your clay slab? . . . Is your structure sturdy and strong? . . . Have you used imagination in slitting, bending, rolling, piercing, coiling, and combining slabs? . . . Is your structure good to look at from all sides?"

Only work that shows imagination and good craftsmanship should be saved for possible firing. The child may be disappointed when his piece has not been chosen for firing. The teacher can reassure him that continued experimentation is a valuable means of gaining knowledge and skill for future success in working with clay.

As the child continues to experiment with clay, using both lumps and slabs for his material, he may discover the beginnings of familiar or imaginary forms. He should be encouraged to use his discovery as a starting point and to pull out or to add pieces of clay to make his idea more expressive. Frequently the discovered forms are related to people, animals, or birds in a real or an imaginary world.

The teacher should remind the child to weld all parts firmly. To help the children, she may demonstrate scoring and welding. Scoring is the process of scratching or cutting into clay surfaces and using slip as an adhesive to fasten the scored parts together. Welding provides additional reinforcement and may be achieved by pressing parts of clay together or where reinforced support is necessary. Parts may be welded with fingers, the blunt end of a pencil, or some other improvised tool.

Cutting a slab from a paper pattern

When children wish to show figures in action they may be guided to bend or turn the clay as they model their figures. While working, the clay form should be viewed from all sides so that the movement of each part of the figure will be seen in terms of its relation to the total design.

The child who has had experience in making and working with clay slabs may wish to make a container of some kind. He may use a simple tool to draw on the clay the basic shape of the container, a circle, square, or free shape, for example, and cut around this shape with a blunt knife. He may also use lightweight cardboard to draft a simple pattern. Since clay is a plastic material, it may be manipulated to assume a variety of forms. The child may take advantage of its plastic qualities by pinching or fluting a rim or by bending it inward or outward. The rim may be supported with wads of clay that will hold it in position while drying. When the clay piece is partly dry, the child, if he wishes to do so, may use a tool to incise a surface treatment on the object. He will enjoy experimenting with various design treatments and textured effects. See pages 61, 62 for suggestions concerning the use of glazes.

Previous clay experiences will have given the child increased ability and confidence. He may now be ready to model human or animal forms in a larger scale than that in which he has previously worked. Dramatizing the emotional qualities of joy, sorrow, or anger may motivate the child to model an expressive figure. The child may work from a large lump of clay and pull out the parts that form the figure or he may form separate parts and assemble them into a figure. He may also make use of slabs of clay. Exaggerating expressive parts will help the child to intensify the emotional feeling he wishes to express. For example, a stooping figure might suggest sorrow or despair. Muscular arms and legs might identify the strong man of the circus. The child is told to turn the clay piece so that it can be viewed and worked on from all sides. The teacher should praise and encourage individual interpretations, rather than stereotyped representations. Tools may be used to clarify the form, add texture to the hair, and pattern to the costume. The child's resourcefulness will be apparent when he discovers objects than can be used effectively to create surface treatment. Screws, nuts, bolts, keys, hairpins, bent wires, small wooden forms, or sticks may easily be used for making patterned and textured effects.

Children should poke or dig out a few holes in the underside of the piece to permit air and heat to circulate and dry the clay form evenly.

Teacher and children evaluate the completed work, pointing out good craftsmanship in constructing and joining clay parts and discussing the movements of the design as a whole. Children should be told to select for firing only those pieces that are solid in construction and pleasing from all views.

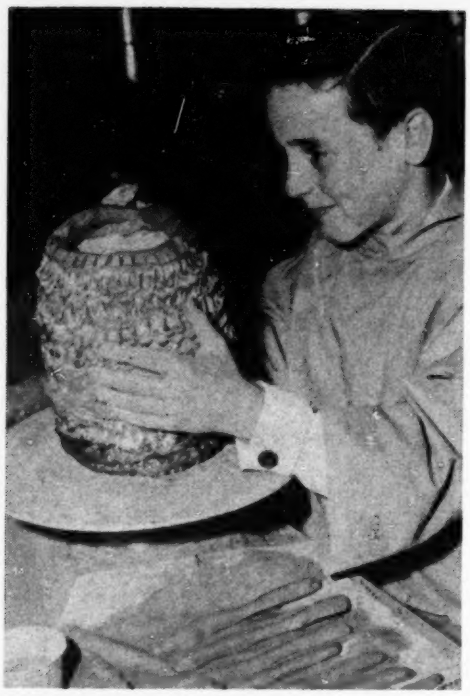
Grades 5-6

Since fifth and sixth-grade children have greater muscular control and wider experience than younger groups, their modeling is likely to show better handling of clay, more varied ideas, and greater sensitivity to three-dimensional form and surface treatment. Again, they will enjoy an opportunity to experiment with lumps and slabs of clay. In addition to these familiar methods, a child may wish to give variety to his work by using the coil method, in whole or in part. This method is essentially an additive process by which forms are built up by the use of evenly rolled coils of clay. The ends of the coil should be cut at opposite angles or tapered so that the joining will be level.

After having an opportunity to experiment freely with the coil method, the child may wish to construct some kind of container. At this level he is able to make coils of an even thickness and to realize the need for joining and welding them carefully. Scoring the surfaces to be joined and adding slip will help coils adhere securely. Because he is concerned with the permanence of the finished form, the child should be encouraged to strengthen inner seams by reinforcing each one with a tiny coil that can be worked in smoothly. The child supports his work with one hand while he models with the other. He turns the

Welding separate parts to construct a figure

Shorter coils make the form curve inward working surface in order to see that all sides of the object are even and pleasing. The child will discover that the placement of the coils will determine whether the sides of the object are vertical, sloping, or flaring. He will realize that, unless he places the coils so that changes in contour are gradual, the walls of his container will spread and collapse. Because wet clay has a tendency to slump under its own weight, a tall form should be set aside to dry slightly after the third coil has been added. As the piece dries and stiffens, additional coils may be built up by dampening, scoring, and using slip on the top edge before a new coil is added. Large clay forms should be wrapped with a damp cloth and put on a shelf to dry slowly.



Building a large coil construction

Combining the lump, slab, or coil methods of construction can be a challenging experiment. As the child experimentally combines various clay forms and views his work from all sides, he may discover some likeness to familiar or imaginary forms, such as people, animals, or birds. Through discussion the child is helped to visualize ways to clarify these forms. The salient characteristics and spirit of the forms should be discussed. How can he give greater expressiveness to his work? A balky horse might have his head thrust upward and his legs in a rigid stance. A dancer might be suggested by the rhythmic line of her body and the graceful position of her hands and legs. An interesting twist of body or bend of arms and legs can add spirit to a pose. Evaluation continues through questioning. "Where is good craftsmanship shown? . . . Do your figures express a dramatic quality? . . . Where does the surface treatment add interest to the form? . . . Which pieces show strong action? . . . Which pieces suggest a quiet mood?"

The child is now able to select a particular idea and express it in clay. He may combine groups of people, animals, and related forms in an interesting arrangement. Through stimulating questioning, the

Modeling an expressive figure

child is motivated to think of subjects related to personal experiences. Discussion might bring out many ideas, such as strolling arm in arm with friends, playing circle games, "Mother and Her Children," and "My Family." When the child has decided on a subject, he selects a lump of clay and divides it into parts, depending on the number and relative sizes of the forms he has in mind. He tries out various arrangements for interesting compositions. Figures or animals may be placed in front of, in back of, or next to each other. He connects parts so that the whole composition is unified. Forms may be joined naturally and simply, for example, by placing the arms of one figure around the shoulders or waist of another figure. Figures may be kneeling, bending, sitting, or shown in various activities. The child should be helped to understand that expressive form is more important than realistic rendition.

A constructive evaluation will help the child improve his work. "Does your group have a feeling of "oneness"? . . . Which pieces show good craftsmanship in completing the clay forms? . . . Which pieces show particularly inventive surface treatment?"

CHAPTER FOUR

Making Posters

Poster designing is unlike other areas of design and picture making in that a poster must attract immediate attention and convey its message at a glance. The dramatic appeal of a good poster's design and color alerts the passer-by to its brief and forceful message. This appeal can be created through the use of a symbolic design or a pictorial illustration, a simplified slogan, and colors effectively combined in a unified design.

Poster activities may encourage children to participate in publicizing school events, in improving the appearance of their school, and in promoting desirable safety and health habits. They also offer opportunities for the application of design learnings gained in drawing, painting, and working with paper. Making posters extends the child's knowledge and use of the alphabet and increases his skill in lettering and in using a variety of media. In addition, it helps to promote awareness and understanding of good design, and to enrich the appreciation of art in advertising and commerce.

Materials

The following supplies should be available: white chalk, crayons, soft pencils, felt-nib markers; scissors, pins, rulers, rubber cement or paste; tempera paint, ¼″ or ½″ bristle brushes; strips of paper, plain and lined newsprint, 12″ x 18″ construction paper, tonal paper, papers of various weights, sizes, and textures, financial or help-wanted newspaper pages.

Classroom Management

It is important that the teacher have the required materials organized in such a way that each child can assume some responsibility for their care. Teacher and class can plan together for the organization of these materials. A table can hold an arrangement of cardboard boxes of various sizes, as well as metal or plastic containers in which crayons, brushes, scissors, and different kinds of paper have been placed. To avoid waste in the use of paint, rubber cement, or paste, ice-cube trays or other small containers should be provided.

Teaching Procedures

When there is a definite need for posters, children can discuss the necessary information and the ideas that might be conveyed. They should be encouraged to think of brief and dramatic ways of expressing the written message or slogan. A slogan urges some form of action, such as: GIVE, BUY, COME, STOP, GO. Having children select the simplest and most forceful wording offers practice in language arts. The choice of key words and phrases may then suggest to children an illustrative idea or a symbol that will make the poster's message clear and striking. For example, "COME TO OUR COOKY SALE" might give a young child the idea of drawing his classmates going to or shopping at the fair. Older children might think of combining cooky shapes in interesting and inviting arrangements that are symbolic, rather than pictorial.

In discussing symbols that might be appropriate to dramatize the poster's message, children should be guided toward the creative rather than the stereotyped kind, such as Valentine hearts or the conventional Red Cross. Children should understand that the pictorial illustration or the symbolic design and the lettering supplement and reinforce each other in making the poster's message easily seen and quickly understood.

Discussion will also bring out the variety of media that might be used in poster making. To some extent, the choice of media—whether crayon, brush, pen, paint or cut paper—will depend on the child's grade level and his previous experiences with these materials. Specific suggestions for suitable media will be found in Suggested Experiences.

Having selected the slogan, and thought about an unusual symbolic design or illustration, the child should experiment with various layouts for his poster. He selects a colored background paper and on it places strips of papers of various colors to represent the lettering, and other shapes of various colors to represent the illustration. He moves these colored shapes around to make several trial arrangments. He may then select the layout that he likes best in relation to the purpose and the design of the poster. He is now ready to consider the specific problems of good lettering.

Developing Lettering Skills

The message in a poster must be legible. Legibility is achieved through the child's ability to form letters correctly and through his sensitivity of good spacing. Single-stroke Gothic letters, as illustrated in the alphabet charts that are available to the classroom teacher, may be used by the child as a basis for his lettering.

Good spacing in lettering requires a visual, rather than a mechanical arrangement. The alphabet is composed of straight and curved letters of varying widths. Good spacing requires that the letters be moved slightly to the left or to the right until the spaces between them appear equal although they will not be equal by actual measurement. Ample space must be left between words.

Legibility is further insured through the use of only one color in the letters of a word. If the child wishes, he may choose a special color to emphasize a key word in his message. Color for the total message should be in strong contrast to background colors. All words should be placed in a horizontal position. Since, in reading English, the eye is accustomed to move from left to right, words placed in a vertical or diagonal direction slow up the carrying power of the message.

Lettering Media

The child should have several experiences in practicing strokes to form letters. Using crayon, paint, or a felt-nib pen, he makes all the strokes that would be used in forming a complete alphabet. He should first master the capital letters; in later grades, lower case letters. The want-ad columns of newspaper or lined newsprint, used horizontally, provide excellent background and guidelines for this kind of practice. The child then practices lettering the words he will need for his message, studies the words to see if they are well spaced, and letters them again in order to improve in manual control, in sensitivity to well-proportioned letter forms, and to good spacing.

Cut-Paper Letters

If the child wishes to use cut-paper letters, he will need to experiment with strips of paper. He will first consider the height he would like his letters to be. Then he will either select of cut strips of practice paper to the desired height. From the strips he will cut as many squares of paper as there are numbers of letters in his message. He will then directly cut out the required letters, preferably in capital-letter form. The child should be told to cut away small amounts of paper in order to produce a thick, rather than a thin, letter. His cut-paper letters may be used as patterns to cut other letters in the colors he wishes for his poster.

Suggested Experiences

Grade 2

Children may make simple posters in which they combine a crayon-lettered word or two with an original picture. The teacher should advise children to letter on separate strips of paper so that they can make adjustments in case of error. They will then paste the lettered strips and the illustration on a carefully selected background paper.

School events call for posters

Grades 3-4

Cut paper is an excellent medium for poster making at this level since it lends itself to simplicity and effectiveness of expression. The child can experiment by cutting shapes directly from newsprint and can easily change his ideas several times before he finally pastes his shapes. This helps him approach his poster problems creatively.

Children's thinking can be motivated by means of questions: "Where do we see posters? . . . Would you like to make a poster telling about what we do in school? . . . What materials would you like to use for your posters? . . . What will your poster say? . . . In what ways is a poster different from a painting?"

The inclusion of a lettered message as part of the poster activity makes the child conscious of the important differences between a poster and a drawing or painting. At these grade levels a poster should be simple, consisting of a single word or short phrase combined with an illustration or a symbolic design which the child himself has made. The illustration or design and the lettering should reinforce each other in order to make the message readily seen and understood. The poster should be planned as a unit in order to present the idea in an orderly and effective design.

The child works out his idea by experimenting first with newspaper and newsprint paper. Instead of drawing, he uses his scissors to cut directly the shapes required for his symbolic design. He cuts strips of paper to indicate areas of lettering. Since newsprint is inexpensive and available in quantity, the child will work freely and confidently in a trial and error approach. He arranges and rearranges his shapes for the illustration and lettering until he is satisfied that he has achieved

One or two words can carry a message

a unified design. He is now ready to work with colored construction paper.

He selects a limited number of colored papers and textured materials. Strong contrast of color and texture will dramatize his idea. The child should feel free to make any changes that will make his idea more effective. Such considerations as large, bold forms, contrast of light and dark and color, and forceful relation of lines and shapes should be discussed with the child as he works.

The child is now ready to letter words in capital letters on the paper strips. From his experience in lettering, he will learn that an effective poster must have legible lettering. He will also find that it is important to know the proper form of each letter, and that good spacing of letters and words result in better communication.

It is important that the child learn the use of guidelines to obtain equal heights of letters, and that he provide sufficient space between lines of lettering.

The child will discover, with practice, that when predominantly vertical letters, such as H, I, M, are next to one another, a little more space must be left between them. When predominantly curved letters, such as U and O, are adjacent, less space between letters is necessary.

The teacher should frequently evaluate the work produced: "Which poster shows a good choice of shapes, colors, and symbol or illustration? . . . Which poster shows the most striking and best arrangement?"

Cut-paper letters may be introduced in the fourth grade. The child may start by cutting a strip of paper in the height he wants his letters to be. He then cuts the strip into squares, cuts out the letters directly, referring to the alphabet chart when necessary, and then assembles the letters into words placed on a lower guide line. After adjusting the space between letters, the child pastes them on a colored strip or directly on the background paper.

Grades 5-6

Designing posters appeals to fifth and sixth-grade children because they are more conscious of the many ways in which posters can stimulate activities. Open School Week, G.O. elections, physical fitness events, school fairs and festivals provide excellent topics for poster making. Interest is heightened through well-planned questions: "How does the poster differ from a painting? . . . What are the most important characteristics of a poster? . . . Why should the slogan and the designed symbol or pictorial illustration be unusual? . . . Why does the poster artist plan his lettering as part of the design? . . . What posters do you remember seeing?"

The child will find that his poster will be more effective if he emphasizes one important idea. In a "Physical Fitness" poster, one suggestion may relate to the value of fresh air in maintaining good health. This may lead children to think of such slogans as "Sleep with Windows Open," "Exercise for Health," or "Walk Daily." The child will realize that it is desirable to use only a brief, clear message and to reduce an illustration to a form as concise as the wording.

Practicing lettering skills

Having selected the message and the idea for the illustration, the child should plan his poster on a trial sheet of newsprint paper. He may make several sketches in colored chalk showing different arrangements of the symbolic design or illustration and the message. He should then select the sketch that shows the best arrangement in relation to the size, purpose, and design of the poster.

A quarter-inch brush and tempera paint, a felt-nib pen, or a thick crayon are all good for preliminary experiences in lettering. Ruled newsprint or the financial or help-wanted pages of newspapers may be used for practice. The latter should be cut in two and turned so that the column lines run horizontally. The child's lettering will be more effective if he experiments with the side of a crayon or with paint and brush, in order to get better control of the tool and to try out different heights and widths of letters. To assist the child, it is advisable that the teacher again refer to the section on developing lettering skills to be found on page 77.

The child may cut some practice strips and shapes from newsprint. When he is satisfied with the layout of his arrangement, he can work with directly-cut construction paper shapes or by using tempera paint on a selected background color. To maintain unity between the picture and the message, colors should be repeated in both areas.

Letters may also be cut directly from construction paper strips, and assembled into words on a background on which he has lightly indicated a lower guide line. After carefully spacing the letters, he pastes directly on the background. The child may wish to experiment with directly-cut lower-case letters as well as with capitals. The symbolic design or simple pictorial element is also very effective when developed in cut paper. Sometimes three-dimensional materials may be added to lend greater dramatic quality to the poster.

Working to create dramatic posters

The teacher should provide for continuous individual and group evaluation with questions, such as: "In which posters do words and design or illustration work well together? . . . Which posters attract and hold your attention? . . . Which have the most original slogans? . . . Where has color contrast been used most effectively? . . . Which poster has the clearest and most legible lettering?"

Every teacher should have developed or reviewed the concepts or word meanings for the vocabulary used in evaluation questions.

CHAPTER FIVE

Working With Paper

Experimenting with and making things from an easily manipulated material like paper is enjoyed by children of all ages. There is a fascination in tearing, snipping, folding, twisting, rolling, pinning, and pasting paper and in discovering the many things that can be done to change its shape and form.

While paper is a familiar material, the child needs time to experiment with it in order to learn the characteristics of the varied types; to discover that he can crease, cut, coil, or pleat papers; and to combine shapes and forms by pinning, tying, or pasting. It is suggested, therefore, that the teacher encourage all the pupils to experiment freely. At first, the child should use only a few shapes and strips of bright-colored paper of various kinds. When the child has discovered how to manipulate and combine different types of paper in various ways, he is better prepared to determine both the size and shape of the article he wants to make and the best way of putting it together. His experimentation usually will enable him to show better judgment in the selection of weight, texture, and colors of the papers for a particular article.

Materials and Their Uses

Poster and construction papers are made in several weights and in a wide range of colors. To supplement the assortment of colored and metallic papers, oak tag, cardboard, and drawing paper available from school supplies, children can be encouraged to bring in corrugated paper, colored cellophane, decorated papers, gift-wrappings, and wallpaper. The decorated papers should be either striped, or in very simple non-pictorial patterns. The variety of colors and textures of these papers will offer a challenge to the child and stimulate his resourcefulness.

For example, a child who is constructing a simple booklet from plain-colored paper may find that he can make it more attractive by adding an outside binding strip and an inside lining of gift-wrapping paper that has a small pattern in colors that harmonize with the cover. Children who are making tree ornaments from folded pieces of striped wallpaper may find that they can give their design more distinction by adding some trimmings cut from transparent colored cellophane, lace paper doilies, brilliantly colored tissue paper, or shining metallic paper. Children who are using plain and colored papers to create hats, table decorations, or place mats for a class party may enjoy making these articles gayer by decorating them with simple borders cut from strips of colored paper or with free designs made with tempera paint.

The weight of paper the child selects will be determined by its use. Tonal paper would not be sturdy enough for a box to hold candy, nor would colored cardboard be appropriate for cutouts on a cellophane party favor. Texture, also, is an element to be considered. There are highly glazed papers, transparent cellophanes, glossy acetates, metallic papers, dull-finished construction papers, coarse grained papers, corrugated boards, and granular-surface papers. The child can experiment to find out how papers of the same color, but of different textures, can be combined to create pleasing effects.

He may decorate a small candy container he has made from colored construction paper with strips of metallic paper of the same color, or he may stitch his green booklet, constructed from glazed paper, with thick green yarn, cord, or florist's fiber tape, all of which contrast only in texture.

Contrasts of both texture and color are even more effective. When selecting colored paper for a specific problem, the child can discover, just as he did in his painting, the many ways in which colors may be used in attractive combinations. By trying one colored shape next to another, the child can readily see how contrast of color and size affects a design. A brilliant red placed next to a vivid green of the same size, will usually be discordant, but if one of these colors is lighter, darker, duller or is used in a smaller amount than the other, the combination will be more satisfactory. In decorating a paper article with simple designs or bands of color, not only must the color itself be considered, but also the sizes of the colored areas in relation to one another and to the background. As the child has repeated opportunities to select, reject, and combine colors, shapes, and textures, he will grow in sensitivity and personal judgment.

Making useful and decorative objects in paper introduces the child to practical problems in functional design. The proposed use of the article must be considered from the very beginning to determine the size and shape of the design, the type of construction, and the materials best suited to the purpose. For example, a scrapbook of the looseleaf type, made by an older child, will require a construction that can easily be adjusted to fit the desired thickness of a filler and that will be sturdy enough to hold securely and protect a quantity of paper. In contrast, because of their temporary use, party favors may be made of lightweight paper and have a less permanent construction.

Making a variety of party hats

Classroom Management

Paper craft experiences may be engaged in by an entire class or by a small group of children. The larger the group and the more varied the materials and tools to be used, the greater is the need for systemized classroom procedures. Necessary materials should be readily accessible to children. Small papers and ready-cut shapes should be kept in separate boxes according to their type, and placed within reach. Such planning by the teacher makes the materials inviting and stimulates personal choices.

Scissors, rulers, brushes, water pans, and other equipment to be used by a large group or by the entire class should be distributed and collected by regularly appointed monitors. The following method of distributing paste has proved successful. The amount of paste required for each group of three or four children is spread on a small, thick pad of newspaper, using a tongue depressor or flat stick. These small portions can then be placed on a tray and distributed quickly. Leftover paste can be scraped back into the jar. Rubber cement, which is better than paste or mucilage for joining metallic, waxed, or other non-porous papers, can be poured into little covered containers (not plastic) for small groups to share.

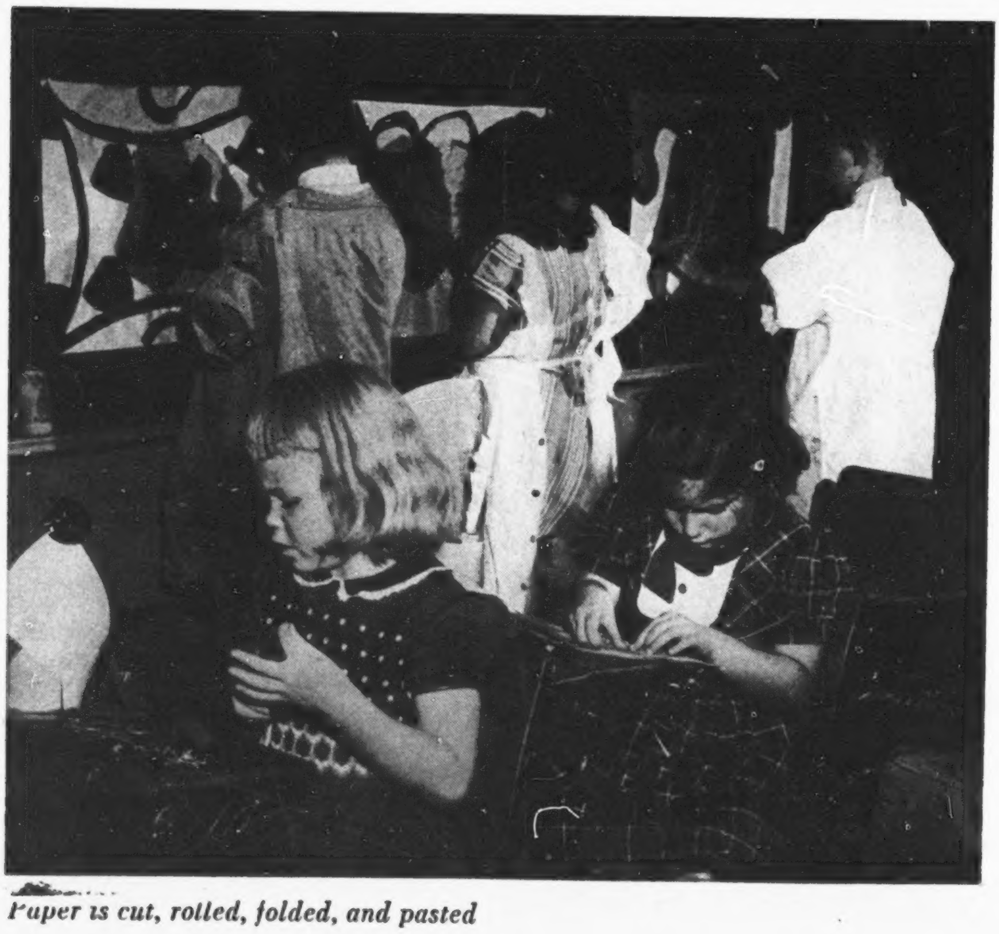
To avoid having scraps of paper fall on the floor, children can learn to cut paper over desks or tables.

The monitors should return boxes of supplies to regular storage areas from which they were taken. Labels on closet shelves will aid in maintaining good housekeeping habits. The children's unfinished work and the individual materials needed to complete a problem at a later date can be kept in labelled envelopes or folders. When sufficient closet space is not available, the teacher can improvise storage space, using boxes of uniform sizes.

Selecting from a variety of papers

Teaching Procedures

All children should have exploratory experiences with paper before they make a specific article. A child needs to experiment in order to learn the characteristics of the various types of papers, to discover what happens when he creases, cuts, coils or pleats varied shapes and strips, and to try out combinations of the resulting forms by pinning, tying, or pasting them together. When a child is experimenting and turning his arrangement around to make it beautiful from all sides, he often discovers that it suggests either a real or imaginative form, or a useful article. Timely guidance at this point will help the child to take advantage of his discovery to create a highly original design. The kinds of paper articles the children make will be determined by their interests, needs, and abilities. When children have decided what they are going to make, they will first need to do some experimenting with newspaper to solve their individual problems of design and construction. During this initial


Paper is cut, rolled, folded, and pasted

exploratory phase, the teacher can help children think out their individual problems by suggesting that they consider the size and shape that will meet their needs, the most practical type of construction, and the relation of these factors to the over-all design. For example, if fifth or sixth-grade children want to make folders for various purposes, the teacher may stimulate creative designing by such remarks as, "That's an interesting way of folding the paper . . . Will it make a sturdy cover? . . . How can you reinforce it if you want to make it stronger?" or "Those proportions for a folder are very pleasing . . . Will that size be large enough to hold all the clippings you expect to keep in it?" Comments similar to these will encourage a child to reconsider the ideas with which he has been experimenting and to decide whether changes in plan are necessary.

After the work is well under way, the teacher can further the child's appreciation and improve his selective judgment by showing well-designed commercial objects made of paper, such as note and memo pads, photo and autograph books, attractive gift boxes, and other small articles. Fine design, originality of ideas, and skilled craftsmanship in packaging, bookbinding, and other paper products will have new meaning for the child because of his related experiences.

Devising ways of fastening corners

Children with limited manual ability or with little previous experience should make paper articles that are of practical interest to them, but do not require fitting of parts or other intricate skills in construction. For example, a fifth or sixth-grade child who has not had adequate experience in measuring, folding, scoring, cutting, or pasting, cannot be expected to make a covered cardboard folder or a writing case as a beginning problem, even though the activity may be generally suited to his grade level. Instead, he should be encouraged to experiment with papers and then to plan and make simple articles, such as a greeting card, a booklet, or a party favor.

Basic Skills

In the following paragraphs, the basic skills needed for paper construction are described in some detail to remind the teacher of the difficulties the child will meet and to suggest the guidance that can be given to further the child's growth. (The developmental stages of growth in paper-construction activities are shown on pages 147, 148.)

Cutting

Most children of school age are able to handle scissors correctly. In the early grades the child can learn to cut along a line or a fold with some degree of skill. As he develops coordination, the child will be able to cut more accurately and to make paper shapes that can be coiled, twisted, or pleated for non-realistic arrangements, tree ornaments, costume accessories for school plays, and props and scenery for puppet performances.

Folding, Creasing, and Rolling

A paper arrangement is largely dependent on the child's ability to manipulate the material. Through experimenting with different types of paper, the child will gradually acquire the skill to make neat, sharply creased folds, to roll a piece of paper or a segment of a circle, or to coil a strip of thin paper.

Scoring heavy paper to make a better fold

When the child shows a lack of skill in folding paper into halves or quarters, the teacher can suggest that best results will be obtained when the paper is placed flat on the desk, the corners and edges are evenly matched, and each fold is sharply creased with a fingernail. When very stiff paper is used, it will fold more easily if it is first scored. Scoring is done by holding a ruler or other straight edge on the line to be folded and drawing the back of a blunt knife or scissors blade along the line to make an indention or groove without cutting through the surface. As he works, the child will find that he can easily make a curved fold or flare if he scores, freehand, along the curved line and creases the paper to follow the scored line. If this curved piece is to be attached to another shape, the child will find it necessary to cut notches or slits to the line in order to make tabs for pasting.

To help the child bend a sheet of heavy paper or oak tag into a rounded or cylindrical form, the teacher can tell him to hold opposite edges firmly and to pull the paper back and forth several times across the straight edge of a desk or table. He may learn to coil a narrow strip into spiral form by pulling it carefully between the thumb and the sharp edge of a ruler, grasped firmly in the hand.

Measuring

The child's ability to measure, so that the parts of an arrangement fit, is another basic factor in paper construction. Measuring may be done with a paper gauge or ruler. To draw a straight line parallel to an edge or to another line, the child should learn to mark off at least two points equally distant from the original edge or line.

Fastening Shapes or Forms

The young child can be expected to do only simple types of paper construction requiring little or no pasting. When paste is necessary, he can be taught how to use only a slight amount so that it will not spread beyond the edges and leave an unsightly mark on the finished surface.

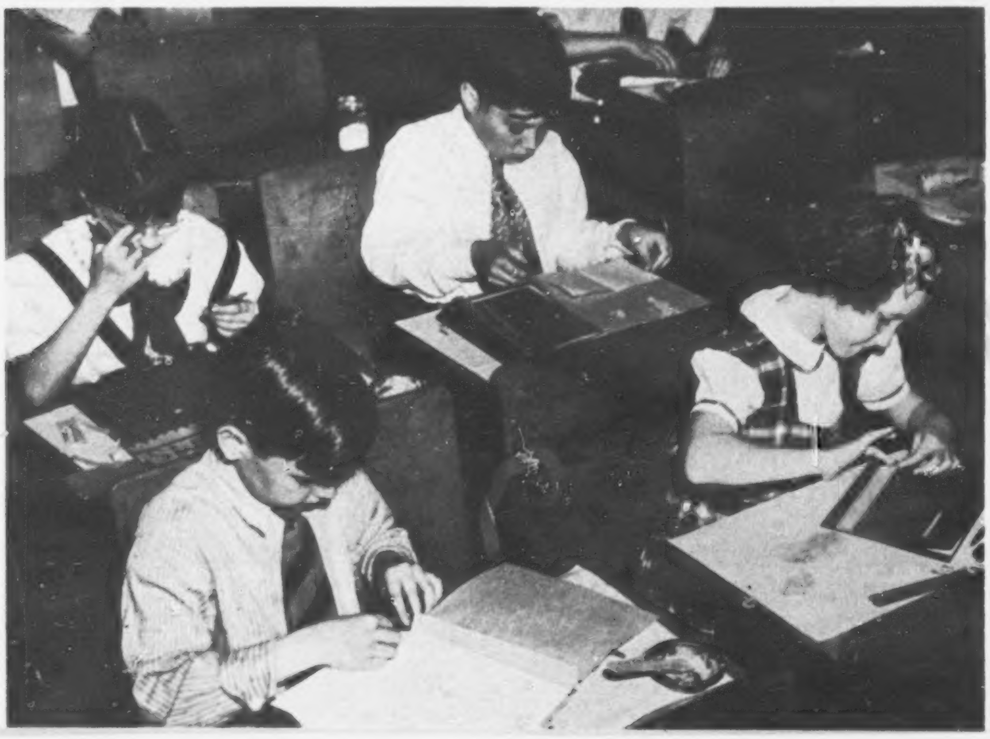
In the third grade and above, the child can be shown how to spread paste evenly over a large area of paper, using a thinner layer near all edges, to insure a neat, flat, firmly pasted surface. When the child pastes several parts of a construction, it is advisable that he place two or three thicknesses of newspaper under the work so that when paste goes beyond the edges of one piece, the newspaper sheet underneath can be folded back and a clean working surface exposed for pasting the next part. To prevent the separation of pasted areas of a paper form, the child will find that he must press the parts together until they are partially dry. To prevent warping, flat pasted articles, either finished or partly finished, should be stacked in piles and placed under a weight until dry. When different types of paste, mucilage, rubber cement, or glue are available, the older child can be taught how to select the one best suited to the problem at hand. Rubber cement is best for most paper-craft activities. Mucilage may be added to paste to increase its adhesiveness. Powdered wallpaper paste mixed with a little water makes a good adhesive. It is worth time and effort to emphasize the correct way of using paste, because the child gets a sense of satisfaction from good craftsmanship.

In selecting the cord, yarn, tape, or paper fasteners to be used in tying, sewing, or binding the parts of booklets or other paper objects, the child can be guided to consider the color, thickness, and texture of these materials as part of the entire design. When placing dots to indicate where holes are to be punched, he should think about the relation of the space between the holes to the spaces above and below so that the tie or binding will serve its purpose and improve the appearance of the design. In the lower grades, the child can bind or fasten a booklet by pulling a cord or lacer through the holes and tying it with a slip knot or bow. Ribbon is usually the least desirable kind of tie or binding material, because it is frequently too bulky and the texture may not be appropriate. If a paper punch is not available, holes for fastening may be made with the point of a tapestry needle or an orangewood stick. The older child may use a blanket stitch or an Oriental binding as a decorative and sturdy fastening for his book or booklet.

Combining many kinds of paper

Decorating Forms or Articles

Simplicity is the keynote of good design. Usually a paper article needs no further decoration than that provided by the contrasting colors, textures, and patterns of the materials used in its construction. For example, a plain-colored booklet cover may have a decorated lin-



Designing booklets for other curriculum areas ing, or a decorated cover may have a plain-colored lining. Excessive decoration detracts from the more important elements of the design: the proportion, color, and relatedness of the design to the purpose for which the article will be used. The over-all design of a book cover, box, or folder can be strengthened through the application of decorative features, such as borders or motifs that echo the main lines of the form. These may be made from colored, textured, or decorative papers, or with tempera paint. Children's colorful crayon drawings made on shapes of paper of suitable size may also be used.

Suggested Experiences

Grades K – 2

The young child's first experiences in paper designing and constructing should be with the few shapes and strips of bright-colored paper he selects from a small assortment. He can be encouraged to manipulate and to experiment with these in his own way. To get the children started the teacher may say, "Here are some pieces of colored paper to have some fun with . . . Choose several pieces that you like and see what you can do with them . . . What can you do to a piece to make it stand by itself?" With this kind of guidance children will feel free to explore the material. One child may, at first, merely fold a piece of paper in half and try to make it stand. A second may curl a long strip to make a large ring. A third child may interlock or interweave two or three of her pieces in response to questions: "What else can you do with your paper? . . . Can you think of some other way of using your pieces?"

Some children will use and re-use all or part of their papers to try out different ways of manipulating them. Others will be so delighted with each shape or form they make that they will want to use a few dabs of paste, paper fasteners, or string to fasten the parts together.

Experimenting with cardboard boxes

The children's eagerness and their enthusiastic response to the creative nature of the experience will stimulate them toward more and more original manipulation of the material and more imaginative designing. The teacher should understand that, in this early stage of the child's designing and constructing with paper, it is more important for him to explore the creative possibilities of the material and to discover the many ways in which it can be manipulated than it is for him to make recognizable objects or useful articles. Gaining familiarity with a few types of paper and finding out how they may be manipulated through cutting, bending, folding, twisting, pleating, or similar handling will provide the child with a background of experience that will enable him to do more varied and original designing.

Creating non-realistic forms

The second-grade child also needs to manipulate and experiment with a few shapes of colored paper to discover the many ways they can be used to make interesting forms or arrangements. He can make his selection from a wider assortment of colors, sizes, and shapes, as well as from different kinds of paper. Construction and tonal papers are excellent for most purposes. Flimsy papers and stiff, heavy cardboards should be avoided because the young child does not have sufficient skill to work with them.

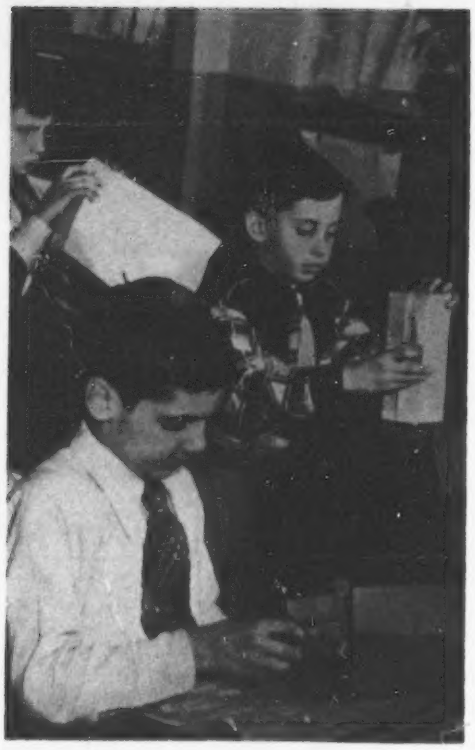
When the second-grade child has had the opportunity to discover for himself, under teacher guidance, the many ways in which colored paper shapes can be manipulated and combined, he will be ready to plan and make forms or articles in his own way. The articles may be booklets, envelopes, greeting card folders, baskets, boxes, favors, or numerous other paper articles which call for little or no pasting and no complicated construction or measurement. The child will plan more freely if he uses inexpensive paper to try out his ideas before using colored papers.

The child at the K-2 level can also experiment with ready-made paper and cardboard forms, such as boxes of different sizes and shapes, containers, tubing, cones, or disks of heavy paper or cardboard. To avoid confusion and to encourage the child's resourcefulness, the teacher should guide him to select only three or four shapes of varying sizes. He can arrange and rearrange these in many different ways. In the beginning he is likely to do what the very young child does with his blocks—that is, place one form on another or line them up. With an encouraging word from the teacher to try other ways of putting the forms together, he will become more inventive in arranging and fastening the parts. For example, to hold a cardboard cylinder in its place on top of a box, he may use bits of gummed tape, he may insert one end in a hole he cuts in the surface of the supporting box, or he may slit one end to form flaps which he can bend out and glue to the top of the box.

The child's first paper box constructions, like his early paintings, block building structures, and clay modelings, usually will be arrangements with no attempt to represent familiar things. In this activity the child uses the paper and cardboard forms just as he does the lines, shapes, and colors in his design painting. However, since paper boxes and other cardboard forms are usually found to have many varied colors and decorations, the child will find it satisfying to paint his entire finished construction with one or two tempera colors in order to give it unity. In order to make the paint adhere to the varied surfaces of boxes, the child should dip his brush in water and rub it on a cake of soap before taking up each brushful of paint.

When the child has had many opportunities to work with various boxes or other forms, some of his arrangements may suggest toys or other familiar objects. On his own initiative he will usually alter or make additions to the basic forms in order to make them more like the objects that the arrangements suggest to him. As in painting, where the child's beginning experiences have a noticeable effect upon the design quality of his later pictorial painting, so also in working with paper, the child's first experiences in creating non-representational design arrangements will enrich his later constructions.

The next stage in the child's development in this activity involves his planning arrangements to represent houses, stores, trains, boats, doll furniture, and other playthings. Although the child may be inclined to complete these objects by painting them in realistic ways, he should be reminded to select and combine his colors for pleasing effects, just as he does in his painting.



Preplanning boxes with newspaper

Grades 3-4

Some children in these grades may not have had the exploratory experiences in paper craft suggested for the earlier grades. These should begin, like second-grade children, by manipulating a few papers selected from a small assortment of construction or tonal papers in various sizes, shapes, and colors. Because third and fourth-graders are more mature, they will have better muscular control and will be more inventive. The background of more varied experiences will enable children to manipulate the paper pieces in different ways and to combine them in more interesting arrangements, usually non-realistic.

Exploratory handling of paper will result in such varied activities as tearing, twisting, curling, pleating, and fanfolding, as well as fringing, scalloping, or notching edges. Children can increase the number of shapes they work with and can use somewhat smaller pieces. The assortment of materials can be larger to include different types of decorated and textured papers, and a wider range of interesting cords, strings, yarns, and similar materials for fastening constructions.

When third and fourth-grade children have had preliminary exploratory experiences with paper and paper boxes, they will be interested in designing and making articles which will challenge their ingenuity and manual ability. With increasing motor control and better judgment, they will be able to plan and make such things as expandable envelopes, boxes with separate covers, booklets made with fan folds, toys and doll house furniture constructed from folded paper or boxes, and many other articles.

Grades 5-6

In these grades, as in grades 3—4, the child who has not had the opportunity to discover original ways in which he can handle paper and design with different sizes, shapes, colors, weights, and textures, should begin with the approach suggested for earlier grades. Then, after many free exploratory experiences in designing and constructing with papers and related materials of many types, he is prepared to preplan with inexpensive paper, and to make articles of his own design.

Even the child who has had ample opportunity in the earlier grades to work with paper should be expected to find out for himself how to design and construct each new thing he plans to make. When he knows the different types of papers and their appropriate uses, he will be prepared to select those which are best suited to his purpose. He will no longer need to rely upon the judgment of the teacher who, in the earlier stages of his learning, made available to him only those materials that were suitable for the problem at hand.

The fifth and sixth-grade children who have already done some planning and constructing, will be ready to create original designs for articles of more complicated construction. These may be stiff-covered books and folders, boxes with attached lids, stage properties, costumes and costume accessories for puppet or classroom plays, and many other useful items.

The foregoing suggestions are given merely as examples suited to the abilities and interests of children and should serve only as a guide in the selection of similar types of problems in which children may make their own decisions about dimensions, colors, appropriate paper, and other necessary factors.

Designing shapes that swing and flutter

CHAPTER SIX

Using Cloth and Trimmings, Yarns and Fibers

Children's imaginations are stimulated by the wide variety of colors and textures found in fabrics, fibers, yarns, and trimmings. They find ways of using these familiar materials at a very early age. A piece of cloth may become a cover for the doll's bed, clothes for a stick or spoon doll, a scarf or cape, or, if the piece is large enough, a tent. Cords or yarns become reins for a make-believe horse or pull-strings for a box or toy. Yarns and cloth used together suggest costumes for dolls or for the children themselves and thus help satisfy the urge to pretend or imagine.

Creating costumes with varied materials

Children discover that discarded clothing and remnants of all kinds can serve as costumes for a princess, pirate, outer-space man, or any character that might be needed for a school play or puppet show.

Most children are interested in clothes. They have their own prefedences in color and style, and some awareness of differences in kinds of materials. It is important for the teacher to utilize this basic interest by setting up creative activities that give opportunities to select colors and textures of materials and to plan simple, useful articles with them. Selective judgment developed through personal choice and use of materials tends to further good taste as the child matures.

The experimental approach is important in designing and constructing with cloth and other materials just as in all other art activities. Experiences in this area should be organized to provide the child with three types of activities so that he learns:

> Through handling cloth and trimmings, to sense their differences and to consider their suitability for specific purposes.
>
> Through combining and using colored threads, yarns, cords, and cloth in a personal way, to make a well-designed and useful article.
>
> Through making his own loom for weaving or through making a pattern for a cloth article, to choose appropriate materials and to devise effective ways for constructing an article.

The order in which these experiences are stated is not necessarily the order in which they are presented to the child; rather, they are interrelated in the learning process. Whether the child is weaving an article, handling various fabrics and trimmings, or designing, constructing, and decorating something made of cloth, it is not enough that he merely learn to follow directions or develop manipulatory skills. While craftsmanship is valuable in weaving, hooking and stitchery, the first consideration should be the child's discriminating choice and creative use of materials.

The developmental stages of growth in these activities are shown on pages 148, 149. It is advisable for the teacher to become familiar with the growth pattern in order to guide the child's progress.

The child should have had some previous experience in painting and drawing in which he had opportunities to choose and combine colors and shapes in original arrangements. His experimentations with cloth, yarn, and trimmings will develop his ability to plan a functional form, to choose appropriate colors, shapes, and textures, and to construct a useful article.

Basic Materials for Grades 2-6

burlap and Dixie mesh

tapes and rick-rack

monk's cloth
plain and patterned fabrics
felt and woolens, cotton
yarns of various colors,
  textures, and thicknesses
lacers and narrow ribbons

braid and tinsel
beads and buttons
needles and pins
scissors
millinery paste
Kraft envelopes

Additional Materials for Grades 3-4

narrow leather strips
cable cord and raffia
plastic perforated strips
trimmings
sea shells
ruler or gauge

discarded costume jewelry
jiffy needle
"Sharp" needles
thread
prepared cardboard looms
Fabric adhesive

Additional Materials for Grades 5-6

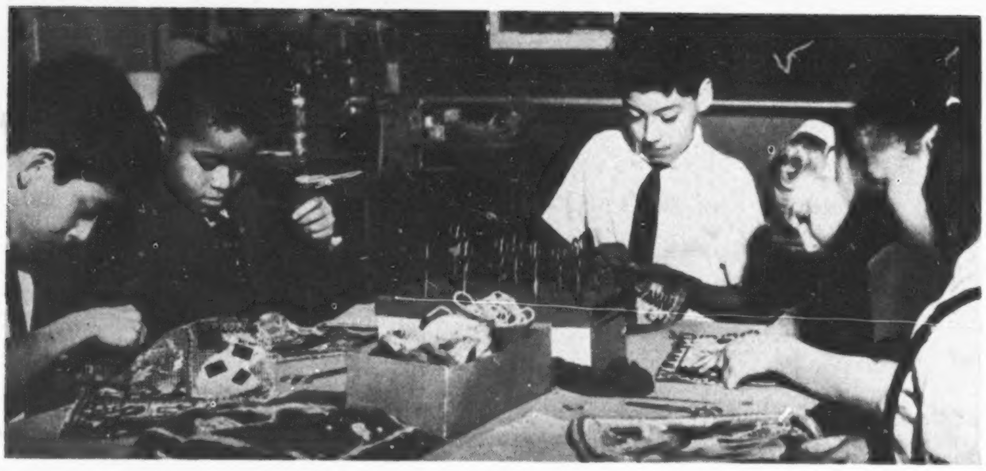
carpet jute
nylon mesh
buckram
felt strips
strips of nylon stockings
¼" strips of scrap cotton
  or woolen cloth

reeds
colored pipe cleaner
#0 crochet hook
thimbles
scotch tape
hammer and brads
strips of wood

Most of the basic materials suggested here are on the G-1 Supply List. Some children may be able to bring in additional materials. The teacher must discuss the problem in advance in order to allow time for collecting appropriate materials.

Classroom Management

Working with yarns and other materials may be carried on as a class or a group activity. In organizing and distributing materials needed for stitchery and weaving, the teacher should plan to make a variety of items available to the children. Skeins of yarn can be wound loosely into small balls or around cardboards for easy distribution; plaits of yarn may be hung on wire coat hangers or looped through holes cut in a piece of cardboard. Fabrics will look fresh and be more satisfactory to work with if they are folded neatly. Small cuttings can be sorted and kept in boxes. If pins, needles, nails, scissors, rulers, pieces of heavy cardboard, and short strips of wood are sorted into labeled boxes, the children will be able to find them easily and to return them to their proper places. When large groups of children need similar items, such as scissors or rulers, these may be distributed and collected. When a child has selected all materials he needs and is in the process of creating a woven article or a piece of stitchery, he should assume full responsibility for his materials. It will simplify classroom management if each child keeps all his materials in an envelope that can be kept in his desk or placed in a box that can be stocked in a permanent storage space or closet. The conven-



Experimenting with stitchery

ience of having his own materials at hand gives the child the opportunity to work on his stitchery, weaving, or hooking whenever he has free time.

Teaching Procedures

Handling materials and discussing their suitability to specific purposes is a valuable learning experience for children. They should have a wide variety of kinds of cloth—woven and felted, plain colored and figured, rough and smooth, shiny and dull, coarse and delicate, closely and loosely woven. Each invites the kind of use and treatment to which it is especially adapted. Yarns, too, are varied. Some are smooth, thin, and tight; others are rough, thick, and loosely made. Each suggests appropriate uses; combining them encourages invention. A child finds it pleasant to see, feel, and compare the firm, sturdy surface of felt with the rich smoothness of velvet or the crispness of gingham and muslin. He discovers that pliable cloth can be gathered into soft folds while crisp materials will hold stiff pleats. As he experiments, he will find that even the same color may appear to vary in different kinds of textiles. Bright red seems quieter in deep-pile woolen material than in satin or shiny velvet, which seem to mirror and emphasize the brightness of the color.

While the child is experimenting with materials, the teacher may ask a few questions to guide his thinking, such as, "What kind of materials have we here? . . . Soft? . . . Smooth? . . . Rough? . . . Hard? . . . Thin? . . . Crisp? . . . Which are figured materials? . . . Which are plain materials? . . . Can you see how the threads were woven to make these materials? . . . What trimmings might look well on some of these materials?"

The child's first cloth article may be made of sturdy, open-mesh materials, like rug-backing or Dixie mesh. Stitchery is done with a large wool darner, tapestry or jiffy needle threaded with wool, yarn, tinsel, ribbon, or thin cord. Later, cloth articles can be made of plain, striped, or checked cotton materials that are crisp enough to hold a creased hem or that have patterns or stripes to serve as guides in planning the width of a seam or the placing of plain colored bands or braids. Because they are firm and easy for the young child to hold, colored felts and denim are appropriate materials for his use.

The older child, because of his better manual coordination, can work not only with loose-weave materials but also with hard-surfaced materials, such as sail cloth and upholstery webbing. He should be encouraged to use any material that will suit his particular purpose.

Children are generally stimulated by materials and are eager to discover what they can do with them. The teacher should be patient with first efforts and encourage the child to use only a few colors and a few materials, and to work slowly. The child's feeling of satisfaction as he works and looks at his product is the true criterion of the value of his work. The teacher should remember that, for the child, the important thing is to think and work creatively even though the product may not be regarded as "finished" or "artistic."

Because the teacher is familiar with these goals, she does not dictate how things are to be done. The child experiments with his materials and tries to solve the problems he has set for himself.

Suggested Experiences

Grade 2

Stitchery

The young child feels quite grown up when he threads a tapestry needle with brightly colored yarn and experiments with stitches on a small piece of loosely woven fabric, such as Dixie mesh or rug backing. An open mesh makes it easy for the child to draw his needle and yarn over and under the fabric. A suggestion from the teacher will help him to achieve variety in stitches and colors.

The child may be challenged to experiment with stitches by going over or under different numbers of threads; by combining long and short stitches; by stitching with both a single and double length of yarn; and by entwining two different colors of yarns. These experiments will result in arrangements that are personal and inventive. If the child repeats the same stitch over and over again, the teacher might say, "You learned to make that stitch very well . . . Would you like to select a yarn of another color and see if you can make some different stitches?"

The teacher might offer additional stimulation by displaying some children's work for an evaluation. Children will be amazed to discover that, although they have all used the same background materials and yarns, each one has achieved a different result. As the child continues with his stitchery, a few challenging questions will quicken his imagination. "Do you have to use a single thread or can you double the thread? . . . Do you like all the edges of your shapes to be even or would you like some of them to be uneven? . . . Do you think it would be a good idea to try weaving one color of yarn on top of another color? . . . Have you tried different kinds of yarns?"

After children have had sufficient opportunities for experimentation, some of them may wish to use subject matter content in their stitchery. As with drawing, their ideas may be related to personal experiences

Making and using their own patterns

or to imaginative themes. While working directly with wools, yarns, and other materials, children should consider color and pattern qualities as well as subject matter. Frequently the child's experiments in stitchery are so pleasing to look at that they can be used for practical purposes, for example, a place mat, wall hanging, sampler, or book mark.

The child may also decide to make a needle case, purse, or some other practical article as a gift for a member of his family. Other children may see the possibilities for using stitchery to make an envelope or drawstring bag. In constructing a simple bag, the child should decide whether the stitchery is to be mounted on burlap or simply folded in such a way that a space is left at the top edge to be folded over for a hem through which cord or braid may be drawn to provide a means of closing the bag. Usually the child in the lower grades is satisfied to make an unlined bag. He will then decide on the amount of material that he wishes to allow for a hem and on the adjustments that must be made to complete the article.

As the child progresses, he may want to use additional materials, such as felt, patterned or textured material, and trimmings. He may select a limited number of new materials and preplan a design by cutting out and combining newspaper shapes. When he has a pattern that he likes, he can pin the appropriate paper shapes on felt or other fabrics and cut them out. He may experiment by shifting these patterns on Dixie mesh until he is satisfied with his arrangement. He may first pin the patterns to the background and then fasten them permanently with an adhesive or with stitches. He may wish to add beads, buttons, braids, or rick-rack as additional notes of interest.

The value of stitchery is determined by the inventiveness in the child's thinking, by his ability to select interesting colors, shapes, and textures, and by the judgment he uses in completing his article.

Grades 3-4

Stitchery

The wonder of creating with yarns, fibers, and other materials offers a particular fascination for the child at the third and fourth-year levels.

The natural curiosity and response of children to tactile experiences and to color selections serve as motivation for their experiments in stitchery. All the basic skills and creative powers that have been developed in earlier grades can be utilized and expanded in continued work with stitchery on Dixie mesh, burlap, monk's cloth, or plastic perforated strips.

Initial experiences in working with materials should involve direct handling and feeling of the materials to discover their possibilities and limitations. Each material and combination of materials offer the child a wide range of opportunities to explore the elements of design and to develop further awareness of the qualities of color.

The child should be encouraged to experiment with various ways of stitching: going over or under different numbers of threads; combining long and short stitches; stitching with both a single and a double length of yarn; and entwining two different colors of yarns. He will discover new arrangements and designs that are inventive and personal.

While the child is working, the teacher encourages him to think carefully about what he is doing. A few questions will be sufficient. "How can you use your yarns to create more variety in surface treatment? . . . Have you combined different kinds of materials? . . . Have you used contrasting colors, shapes, and textures?"

A medial evaluation will further help the child to bring out the parts he wishes to emphasize and to relate them to the background area. A few more thought-provoking questions will clarify his ideas and foster his inventiveness. "In which of these experiments do we find a good use of materials? . . . Where do we see unusual combinations of stitches? . . . Where have textured yarns or fabrics enriched the surface?"

Designing with wool and other materials

Although some children may use recognizable subjects, such as trees, meadows, houses, boats, human figures, skies, or clouds in their work, the nature of the material and the creative process usually lead to an imaginative approach without any effort at realism. Working directly with materials, the design grows and is modified as the work develops. This experience creates in the child a desire to design and construct a practical article for his personal use or a gift for a special occasion.

Making articles for personal use

Some of the articles suggested at this time are flat and folded articles, such as a case for comb or nail file; cosmetic case; bag with drawstring or zipper, belt; mittens; costume accessories for a party, class play or puppet show; and aprons for painting or work.

The child now looks over the various materials and selects a particular fabric. He visualizes the article he wishes to make and plans its proportion, size, and type of construction. He may do this with newspaper or with newsprint.

Using the paper pattern, the child cuts out the shapes, pins and stitches them in place. He then selects the trimmings he wishes to use and works with them directly on his material to design and enrich surface.

The child completes his work, using his best judgment to make article that is sturdy in construction, attractive in appearance, unusual in design.

A final evaluation will help the child learn how he may improve work in the future. "Who has chosen the most suitable fabric for article? . . . Why did you make that decision? . . . Which articles s good use of colors, shapes, and textures?"

As in all creative activities, emphasis should be placed on crea approach to designing and constructing with materials, and on care the child uses in choosing shapes and colors.

Using yarn to make a doll's wig

Using trimmings to complete a costume

Sock Toys

Making stuffed toys from used socks is another experience to wh children look forward with great pleasure. After reading an exci story to the class, the teacher might ask: "Would you like to mak stuffed toy that would look like one of the characters in the story? Maybe some of you would like to invent a person or an animal . What kind of scrap material would be good for us to use? . . . W what material can we stuff our toys?" Then the teacher might sh them a few stuffed toys. The children should be encouraged to br discarded socks and other materials that have been cleaned pressed, for a "Treasure Box" in the classroom.

The child usually starts by making the head of his planned toy sock is best suited for this purpose because of its tube-like structu The child experiments to find which part of the sock is best suited a head. He determines its size and stuffs it with cotton. After the h has been stuffed, the child winds enough thread around the neck make a firm closing. The ends of the thread are tied together secur A great deal of inventiveness can be used to bring out the features the toy character. Beads, buttons, appliqué, felt, and yarns may used for this purpose.

Children cut other parts of the body from left-over sock mater The torso can be made from a stuffed tubular section. Arms, legs, other sections may be cut from other parts of a sock. Sufficient all ance should be made for seams. After the parts have been stuff they should be joined to the body with strong thread. If the ch wishes to be able to move the arms and legs, for example, he m sew an extra fold of cloth or tape to the body, then sew the arm or to the free side of the tape. To enhance the appearance of the t the child may want to add hair, tail, mane, or other similar featur Through experimentation, he will discover a simple way to add h which may be trimmed or styled. The child should determine the ty of hair style or any other feature that he wishes for his toy. Experim tation in making hair might include the use of wool, celotex spong steel wool, cotton batting, excelsior, wood shavings, and ot materials.

Arranging a display of classw

Appliqué or other decorations, made from buttons, beads, pipe cleaners, felt, braids, colored yarns, and bits of cloth may be used to decorate the costume. The child should always keep in mind the final purpose of the stuffed toy. If he is making it as a gift for a baby, all three-dimensional decorations should be omitted.

When the toys are completed, they may be placed on display for evaluation. The teacher may ask: "Whose toy looks like something you have read about? . . . Which toys are very imaginative? . . . What toy looks strong and well made? . . . Which toy is decorated in an unusual way? . . . Whose toy has exciting color combinations?"

Pattern Making

The latitude for inventiveness in stitchery in Grades 3-4 is greatly expanded. Children will be able to design many articles for themselves or for gifts. Choosing their own materials and color schemes, and making the original drawings for their articles give the children great satisfaction.

If some children choose to make soft toys, they can make drawings for them directly on newspaper. The children then examine their drawings and, with the teacher's guidance, decide whether they can reproduce them with a one-piece pattern or whether they will need to cut head, legs, and arms separately. If one pattern is sufficien cut out the drawing, fold the selected piece of cloth in half an the cut-out pattern on it. "Have you allowed for seams? . . . A saving material where you can?" . . .

The children then trace the pattern on the cloth with a crayon ing margins for seams. Should the article require a pattern co of several pieces, the children will proceed as before, remem to allow for seams on all parts and not to waste material. If th has a printed surface decoration, the teacher may ask, "Ha placed your pattern on the material so that the surface design w well? . . . Do you think you should move your pattern aroun more before you cut into the material?"

Beginners weave with heavy cord

After cutting out the shapes, children place the cloth shapes face, pin them together, and sew along the crayon outline with stitches. Along one edge they should leave an opening large to put a hand through, for stuffing. Decorations may be added before or after stuffing.

In the final evaluation the teacher may ask, "Who made a toy? . . . Where do we see new combinations of materials? . . . work shows careful stitching?"

Patterns are also called for when children make costumes fo puppets or for a class play.

Weaving

Weaving is one of the oldest art forms. It was originally a sary step in the making of clothing. Today people weave becau enjoy the beauty of hand-woven products and the satisfaction o ing them.

In introducing this craft experience, the teacher may suggest to the Museum of Natural History or to the Museum of the Am Indian. For further motivation, the teacher might encoura children to examine a variety of textured materials, such as terry huck towelling, velvet, silk, monk's cloth, burlap, and Dixie me pulling and unravelling some edges, the children can determine of these materials show the simplest type of woven structure.

For their first weaving experience, the children are given pared cardboard loom. In examining the loom, they will notic there is an odd number of perforations at each end.

The vertical threads which the child first puts on the loom are the warp threads and they are generally the stronger ones. The is threaded on one side only. Beginning at the top left, the en long length of warp thread is put from front to back through th hole. A knot holds the first thread in place. The thread is then b through the lower perforation and out again through the secon foration to the lower front. The process is continued until the v warp lines the face of the loom. The last thread is tied in place back of the cardboard loom.

The weaving process is started at the bottom, right hand side loom. It may be done with the fingers, a bodkin, or large needle, depending on the weaving material, or weft, to be used. The weft thread is first tied to warp thread about one inch from the lower right hand edge. The thread is then woven under and over the warp to this edge (which forms the selvage), then woven back to the opposite side, brought around that selvage edge, and woven over to the opposite side. The operation continues with similar back and forth weavings. A new weft thread should be started by overlapping the old thread by an inch or so.

In simple weaving, or going over-and-under one thread at a time, the child is able to develop two of the essential weaving skills: pushing down the woof with the fingers or flat stick so that it lies close to its neighboring strand and avoiding pulling the woof too tightly, so that the selvage edges of the weaving remain vertical.

By questioning, a teacher can guide the child toward experimental weaving: "What would happen if you went under and over several threads, or under a different number, and tried repeating this process all the way across? . . . Could you change your count again on the next row?" In this way, it is possible for the child to produce endless variations in his designs. It is also possible for the child to change the color of the weft, thus producing a striped design.

The completed woven article can be removed from the loom by breaking off the cardboard at the perforated edges.

The loops must be made secure by using an overcast stitch, catching each loop with a needle, or by using a crochet hook and pulling a chain through the loops.

Fringes may be added to complete articles such as bags, place mats or aprons. First the loom should be cut. By knotting pairs of threads at the ends of the woven piece, a fringe is formed. Fringes may be varied by knotting two or more rows.

Designing with colored yarns

Other woven articles suggested for these grades are: needle cases, change purses, cosmetic cases, pin cushions, and belts.

When the articles are finished, they should be displayed to develop further learnings through evaluation on an impersonal basis. A few more thought-provoking questions will show the child how he may improve his future work:

"Which finished piece shows the most beautiful combination of colors? . . . Which piece shows an ability to keep edges even? . . . Which shows careful work? . . . Which piece shows good taste in selecting and using textures and materials?"

The child should be so stimulated by the results achieved that he will want to make other articles at home.

Experimenting with cloth and trimmings

Combining applique with stitchery

Grades 5-6

Stitchery

A challenging array of brightly colored yarns, fabrics, and other pliable materials invite the child to use them in his own way. Regardless of previous experiences, the fifth and sixth-year child needs opportunities to experiment. Handling and manipulating materials, and trying out decorating material on background fabrics, will further creative thinking. At this level, suitability should be stressed in the choices of colors and fabrics for specific uses. It is not too early to encourage children to apply art learnings to choices of colors and textures for their own wardrobes.

The child at this level, too, should be encouraged to experiment with stitches by going over or under different numbers of threads; by combining long and short stitches; by stitching with both a single and a double length of yarn; and by entwining two different colors of yarns. As a result of this experimentation, he will discover arrangements that are inventive and personal.

Fifth and sixth-grade children usually like to make things that they can use themselves: bags of different types and constructions that can be finished with zippers, hooks or button; beach bags with inside pockets, mounted on frames or hoops; hats with decorative trimming; felt or woolen mittens; costumes for puppet characters; curtains and accessories for a puppet stage; and costumes for a party or class play.

Pattern Making

Children at this level are able to plan many useful articles which may be made of cloth. They should make trial patterns of newspaper and test them for seam allowances and appropriate types of construction. Because of their previous experiences they are capable of visualizing the finished article and choosing the colors, material, textures, trimmings, colored yarns and threads suitable for their articles.

When the child is satisfied with his pattern and the selection of his material, he pins the pattern on the cloth, considering the best placement in relation to surface design or weave. He is then ready to cut out his pattern and sew the parts together with strong stitches.

Before progressing too far, it is advisable for him to check his work so that any necessary adjustments may be made.

The teacher should provide frequent guidance and evaluation of the child's work so that he may use his best judgment in completing his article.

The following questions may be helpful in a final evaluation: "Which article seems to be well designed and constructed for its purpose? . . . Which article shows a pleasing combination of colors? . . . Which article shows an appropriate use of textures and trimmings?"

Weaving

The children in the fifth and sixth grades need many opportunities to practice weaving. They should be given a wide choice of materials: varied textures of yarns, fibers, nylon stockings, felt, leather, and cotton or woolen cloth. Some of these materials must necessarily be cut into narrow strips. A trip to one of the museums will awaken the children's interest in weaving. Some of the museum looms will be more complicated than the looms that the children will construct for their own use in the classroom. The children, however, will be able to observe in a general way, the process of weaving.

Children have sufficient coordination and ingenuity to make their own looms. They may experiment by putting adhesive tape over opposite edges of a piece of cardboard. An odd number of pins placed at identical intervals in these thickened edges serve as fixed points for the attachment of the warp threads. The spaces between pins may be narrow or wide, depending on the thickness of the warp threads to be used.

Weaving on a picture frame loom

Children may experiment with various types and colors of yarns, strips of material, or ribbons to create different textural effects. The designs resulting from changing the number of threads, over-and-under which they weave, may show diagonal, triangular, horizontal, vertical, irregular, or block patterns in unlimited possibilities.

Other types of looms may be made by hammering an odd number of brads into the outside edges of two opposite sides of a discarded picture frame or of one made by the child out of four strips of wood.

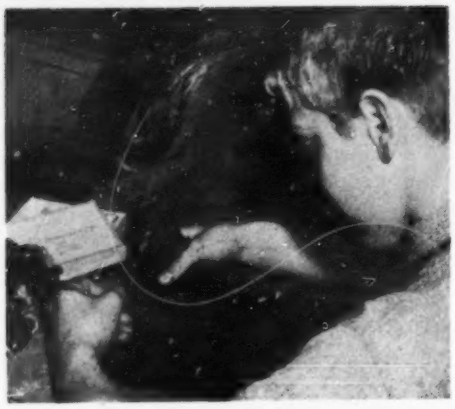
Using a box loom

The child should always select the colors and textures for his woven fabric very carefully. He should consider the contrast and proportion of one color area to another. He should make a sensitive selection of coordinated colors and varied textures.

The following questions will help the child consider his own work: "Which weaving shows originality and inventiveness in using colors and textures? . . . Which piece shows good control in keeping the edges even? . . . Which piece shows inventiveness in combining threads and stitches to make an interesting pattern?"

Hooking

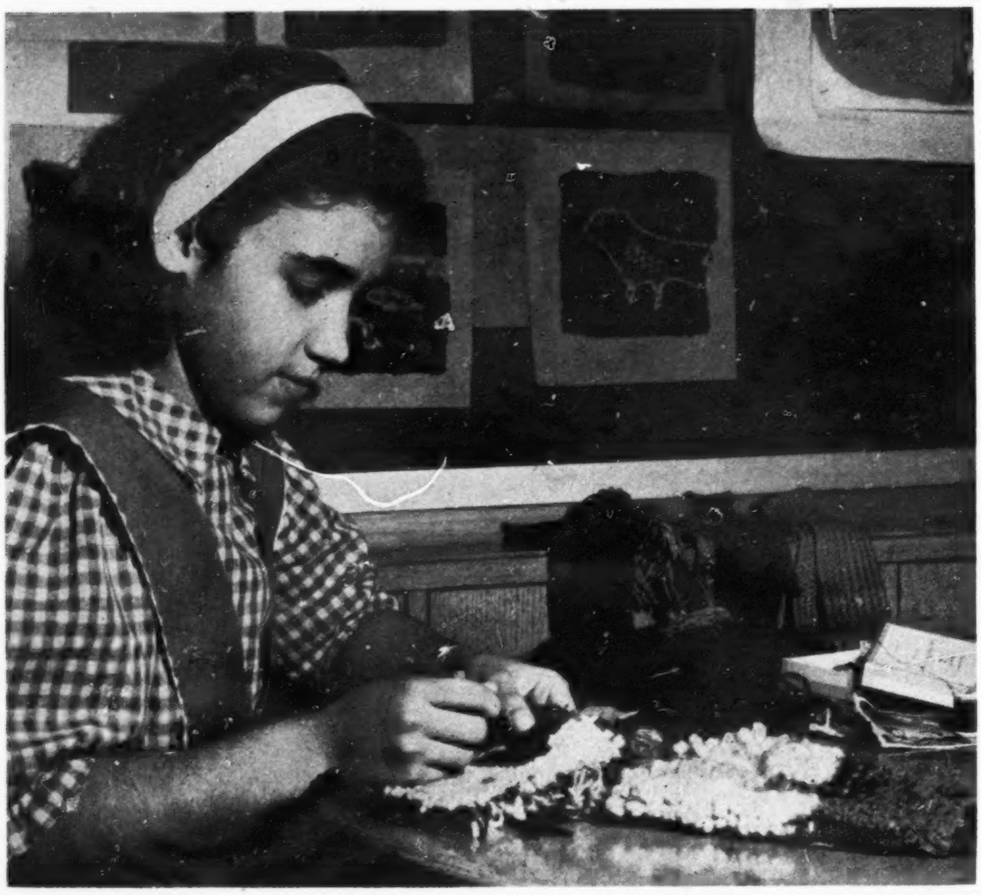
The process of hooking is a challenging experience for the child at this level. It offers opportunities for developing the child's ingenuity in designing many practical articles. The teacher may motivate an interest in the hooking process by showing a few simple examples. There is a particular advantage in hooking because discarded or scrap materials may be used and are easily available. Old sweaters may be ripped and the yarn re-used after being washed, dried, and wound into hanks. These materials are stored in a "Treasure Box" for future use. Used woolen or cotton clothing, or nylon stockings are cut into narrow strips. The width of the strips varies with the weight of the material; the lighter the weight, the wider the strip. Since nylon stockings are very thin, they should be cut in spiral fashion about an inch-and-one-half wide. A little preliminary experimentation will help the child to decide which width is best, so that the strip may be drawn with ease through the backing. The only tool necessary for this craft is a large, strong, crochet hook.



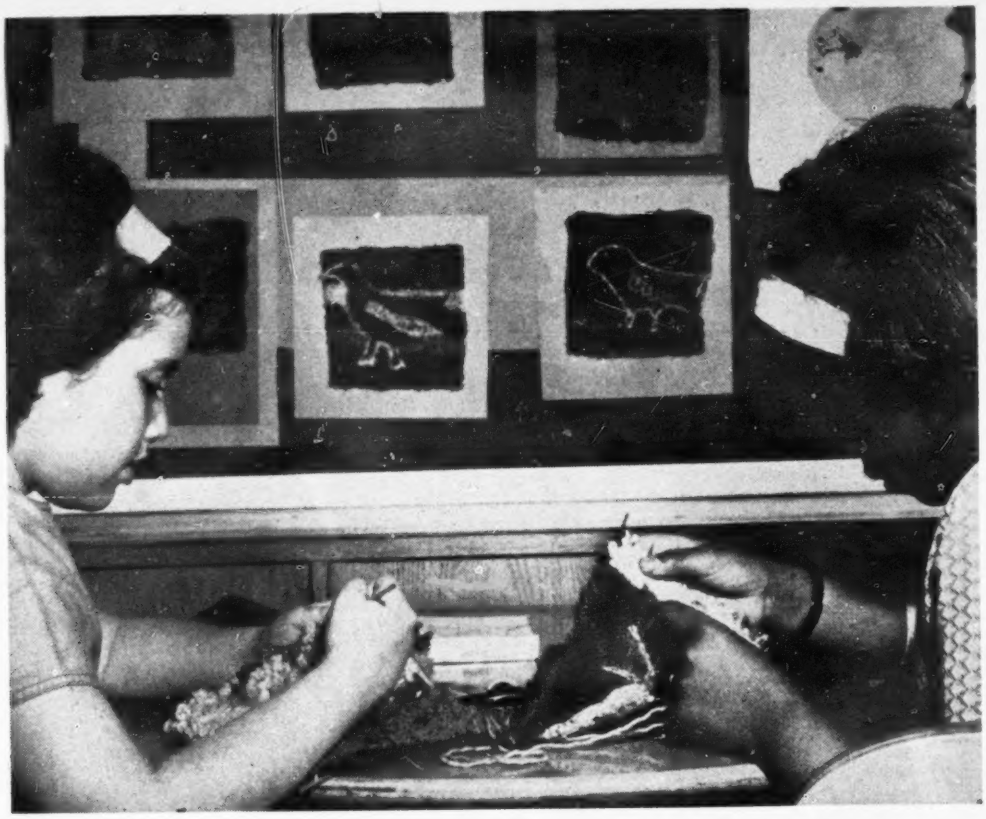
Experimenting with hooking

For a first experience, the teacher provides the child with an eight-inch square of burlap, a hook, and some strips of material. The child holds a strip of material close to and under the burlap at the point where he wishes to start. With his right hand, he pushes the crochet hook from the top, down through the background of the material. He pulls the end of the strip to the top surface with the crochet hook. As he continues with the same process, his next stitch will form a loop. All the loops should be a little more than one quarter of an inch high and hooked closely together, so that they will not pull out.

The child holds the first loop in place with his thumb at the top and his first finger underneath and continues doing so until he has made a sufficient number of loops so that they will not pull out. If the child wishes to change the color he may cut the last loop, leaving the end at the top. He may begin again by pulling the end of the new



Design may grow without pre-planning



Design may first be planned in crayon or chalk

strip to the top. Variety in textural effects may be achieved by experimenting with different lengths of loops: long, short, or a combination of both in definite areas, or by a graduation of loops going from long to short, or short to long, to create an interesting background pile.

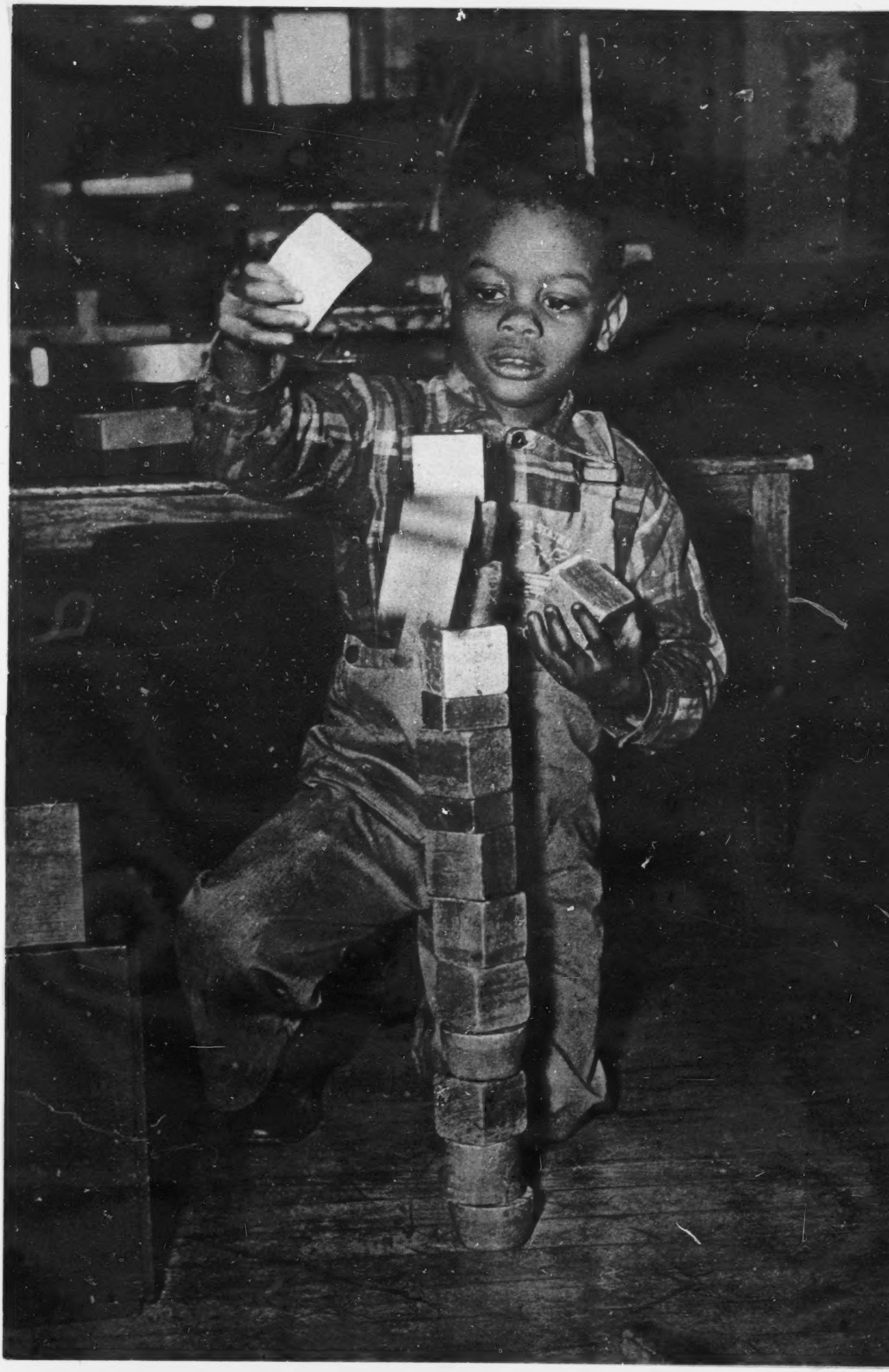
The child should consider the need for contrast in color, placing light colors next to dark. He may use either lines or shapes to bring out a design. He may plan for one area to be important or emphasized.

Later on, the child may want to design and make an article for a specific purpose, such as a tote bag, foot-stool cover, chair pad, or table-mat. After the child has decided on the article he wishes to make, he plans his pattern on newspaper. He then cuts his pattern and checks it to see if it will fit perfectly and makes allowances for hems and other adjustments. Usually a three-quarter inch hem is sufficient. He turns the hem under and bastes it to prevent its fraying. The child places his pattern on the burlap so that he will have the least possible waste. If the piece is fairly large, it should be thumbtacked to a frame and made taut. An old picture frame may be used for this purpose.

At this level the child should be able to assume responsibility for his own materials. Whenever time permits, he may work on his hooking which he keeps in an individual sewing envelope.

When a few pieces of work have been finished, they may be evaluated: "Is the design appropriate for the purpose? . . . Which design shows skill in the handling of material? . . . Are there any designs that show a feeling for texture through variation in the height of the pile? . . . Which design shows unusual sensitivity in the selection of colors?"

A child's creativity in the hooking of designs will parallel the art learnings he has acquired in other areas. He will utilize the knowledge of line, color, shape, and texture he has gained in his painting experiences. Since hooking is an experience in which fascination grows with practice, it may become an impetus for a lifetime hobby.



CHAPTER SEVEN

Building with Blocks

Block building has long been accepted as a valuable experience for very young children, but it is only recently that its full possibilities for child development have been recognized. As a result of this recognition, children in grades beyond the kindergarten have been given opportunities to build and design with blocks. The nature of blocks—their simplicity, solidity, and permanence—

suggests to the child ideas of touching, grasping, pushing, lifting, carrying, combining, arranging, and rearranging. Such activities are familiar and satisfying avenues of learning. Through exploring with blocks, the child discovers what can be done with them, and at the same time tests his own range of abilities. Thus he learns to create in an additional medium.

Materials and their Uses

The choice of blocks is important in providing experiences for the child. Blocks that have planned relationships between the various sizes and shapes, such as the Carolyn Pratt blocks, stimulate order, rhythm, and balance in arranging and building. The unit block in the set is a bricklike form of which the other blocks are multiples or fractions. These comprise the basic assortment with wedges, arches, and cylinders to complete the set. A minimal assortment for individual use at the kindergarten-grade one level should be:

32	units or bricks
16	doubles
8	quads
4	wedges
3	cylinders
2	half circles
4	quarter circles

For use in second-grade classes, additional blocks of these basic sizes and shapes, together with slats, ramps, buttresses, and the "Y" switch, can be added in accordance with the amount of space available.

The floor area for block building should be clearly defined; it should be out of traffic lanes, and preferably away from the toys. A piece of linoleum, approximately six feet by six feet, or a space of the same size marked off on the floor with a line, will afford a good working area for a child.

The blocks should be set up in or very near the child's working space, and they should be stacked so that comparative sizes are easily noted by the child. This helps him to select the blocks he wishes to use, simplifies the "putting away" process, and develops orderly work habits. In the beginning, it is sometimes necessary to train one or two children in stacking the blocks, so that they may help those who have not yet learned the routines.

The child gets additional value from block building when he can work by himself. He needs time to experiment with all the blocks in the assortment. Free of interference and feeling no rivalry with other children, he is able to enjoy the smoothness of the wood surfaces and to sense the shape, size, and weight of each block. He experiments with space, height, and number relationships according to his level of maturity and his rate of learning. A child cannot explore such relationships when he is surrounded by other active children; for in this situation the available space constantly changes and the definiteness of forms is obscured. As he improves in ability to do things with blocks, the child feels a pleasing sense of power and achievement. At the same time, he is gradually organizing his thinking better and clarifying his feeling and ideas. He discovers that there are many ways of achieving stability and balance as he varies the size, form, and rhythm of a construction.

Sometimes two plan and work together

While the child is exploring and learning for himself, the teacher refrains from making suggestions, or giving his construction a name. The teacher may comment on the child's ideas, on the sturdiness of the structure, or on the fact that it looks pleasing from all sides. The teacher does not pay too much attention if the child knocks down a structure he has built, since it is known that action is often a harmless outlet for pent-up feelings. Such happenings are less likely to occur if the working situation is well organized and the classroom atmosphere pleasant. Moreover, as the child has satisfying experiences with blocks, he comes to respect this kind of material. He learns, too, that it contributes to his own comfort and convenience, as well as to that of others, if the blocks are carefully re-stacked after use.

Blocks lose some of their intrinsic values when other values—

social, literary, or dramatic—are introduced into block building soon. The child who always wants to include toys or other prop his block building should be encouraged to see what he can do with blocks alone. Toys may too strongly suggest dramatic before the child has had time to discover what can be learned f blocks as basic materials. Moreover, toys may lead him to try more realism than he is yet able to achieve. To the child with v imagination, a block can represent almost anything, and his arra ments may express thoughts and feelings that cannot be put into wo

The child who has had ample opportunity to become acquai on his own with blocks and their possibilities is in a better posi to do cooperative block building with other children. Perhaps best beginning for such group activity is for the child to invite ot to build with him. In working together, children enjoy using bl to express their ideas about various things, particularly the neigh hood, with its outstanding structures, traffic lanes, tunnels, bric and varied activities. Not too much emphasis on exact informa should be made by teachers observing such projects. Rigid planning is not desirable, as it limits the block building to the fillment of a single idea. Rather, ideas should grow as the chil think and work. Dramatization comes normally with group act in block building, and then toys may be used. However, if too m toys are assembled at the start of the project the child may be distra from his part in the enterprise. A child may become so delighted the feeling of power that he gets as he propels a car or an airplane the social and developmental values of block building are lost to

Suggested Experiences

Grades K – 1

Successful block-building experiences depend on the kind number of blocks used, and the care exercised in organizing blocks and arranging a suitable space in which the child can v When these factors are considered in advance, the teacher nee little more than invite the child to see what he can do with the bl Individual and group block-building experiences are recomme for all children of this age group. Individual experiences sh precede group experiences. Children who have had no experi with blocks of the Carolyn Pratt type at first build very much like or three-year-olds, making linear, wall, and floor type struct Later they enclose and bridge space with blocks, and arrange combine blocks to enrich the form of a structure. Finally, as they more conscious of space and of three-dimensional form, they more solidly. They will move around a structure to see whether design is what they want. Some children are interested in fun or suitability for use, and often add toys and make provisions in building to accommodate them. As pupils build, they devise tun bridges, ramps, entrances and exits, and thus learn to think abou space they need for things to move into, through, under, on top of, around, and out of the various structures.

A space larger than 6′ x 6′ is necessary if more than two children are to work together in block building. Some children, although they may build in the same working area, build separate structures that have little relationship to one another. At this age level structures generally grow without much preplanning. In some groups, one child may begin building a bridge with a ramplike structure. This may suggest the addition of a house, garage, tower, or fire house to his partners, and a cooperative project begins. When children have done individual block building, they usually have ideas to contribute to the project and need not act merely as bricklayers. Teacher guidance and stimulation in individual or group experiences lies chiefly in recognizing the best features of each construction—its orderly arrangement, design, strength, or inventiveness.

Grade 2

The basic blocks recommended for the earlier grades should be increased in numbers for second-grade classes. Such forms as buttresses, the "Y" switch, large ramps, and slats should be added to the assortment. A child in the second grade, whether or not he has used blocks before, will profit from working alone, at first, and from

Balance and design in block building

time to time afterward, with the complete assortment of blocks. Thus he will gain more skill in handling and stacking, more ideas in building, and a feeling of pride and power in his ability to control all the materials as well as the building process. When he wants to build with others, he will be better able to cooperate, to take his turn as a group leader, and to choose members of the group. He can do a little preplanning and help keep a project unified.

At this grade level, as in the earlier grades, content should not be stressed. Emphasis should be placed on the children's fine use of materials as evidenced by the compactness of their structures, the creativeness of their design arrangements, and the inventiveness shown in their constructions. In using any structured or semi-structured material, what the child does is determined to some extent by experience. When the child is encouraged to use the material creatively, the experience gives great emotional satisfaction and a sense of achievement, which in turn develops personal competence. He feels that he himself can build, modify, destroy, and rebuild his structures, thus strengthening his feeling of power and satisfaction in accomplishment.

The child working alone or in a small group should be encouraged at all times to experiment with the blocks, and to maintain a personal and creative approach even when his ideas for building are formed through trips, films, stories, and learning in other areas. Groups of not more than three or four children are the best size for successful early projects. During the school year each child in a class should have an opportunity to act as group leader and choose his partners. The children will need a little time to plan together before beginning to build. When they seem ready to start the actual building, the teacher can ask a few questions or make a few comments to help the children organize their ideas and plan each child's share of responsibility. One may say: "You look as though you have made your plans and are ready to start building . . . Have you decided what you will build first and where you will begin? . . . Are you planning to use all the space? . . . Have you an idea of what each one of you can do to carry out the plans?"

When the child has opportunities to use a material creatively and constructively in a give-and-take situation with others in a group, the experience helps him learn how to be a contributing and valued member in a democratic society.

It is important to remember the values in block building and to continue it as educational procedure even beyond the second school year. The variety and type of blocks in the commercial market should be investigated. New types may be provided to give the older child many other kinds of creative experiences that will challenge his developing manual skill and his improved ability to think, observe, imagine, and build.

CHAPTER EIGHT

Constructing With Wood and Other Materials

A child's growth in inventiveness is furthered as he experiments, designs, and constructs with wood and other materials. The hardness and resistance of wood itself offer a new challenge. The three-dimensional quality of the materials, the variations in thickness, weight, texture, shape, and type stimulate interest and provide initial motivation for the child's experimentations. Through han-

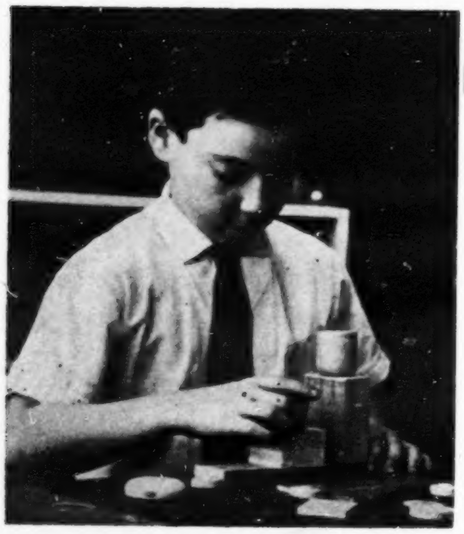
dling and manipulating materials, he becomes aware of their solidity, volume, and structural nature. He senses problems of craftsmanship to be met and solved.

Experiences in constructing with wood and in combining it with related materials may open up avenues to the appreciation of art qualities and craftsmanship in various articles made of wood. The child may be guided toward an appreciation of function in form and construction, simplicity in design, and innate quality of the materials used.

Selecting wood for first experiments

Materials

A wide variety of materials in assorted sizes and shapes is highly desirable for this area. It may include scraps of wood, sticks, clothes pins, toothpicks, colored balls, dowels, drawer knobs, wheels, spools, picnic spoons, and forks. Bamboo sticks from old match-stick curtains, driftwood, and wooden parts from discarded toys will add variety to the assortment. Children may collect many of these pieces from home, local lumber yards, carpenter shops, and neighborhood industrial plants. Wooden cores, tubes, disks, spindles, and boxes are frequently discarded. Short lengths of wood, disks, colored balls, and sticks may be ordered from the G.1 Supply List.



Combining forms in trial arrangements

After the child has had several experiences in working with simple wooden shapes, new materials that will offer possibilities for more sensitive selections may be introduced. These new materials should be related to wood through their qualities of texture, rigidity, or semi-rigidity. They may include corks, bolts, washers, wire coat hangers, wire screening, strips of pliable metal foil, basket reeds, and small plastic containers.

Colored string, wool, coated wire, and similar materials may be used to introduce linear elements into a construction. Transparent materials, such as gelatins or plastic sheets, may be used to create a feeling of lightness and to describe open areas within an arrangement.

Classroom Management

It is important that the teacher plan the organization of materials, tools, and work space for construction activities so that children may work with safety in a designated area of the classroom. A sense of responsibility is gradually built up as children come to realize the need for proper care of tools and equipment. The sharing of tools involves cooperation and a respect for the rights of others.

When children begin to use tools, they will find that they can work best when standing. They need a firm, level surface at a height that will enable them to handle a hammer, saw, and other tools correctly and easily. Either a regulation workbench or a sturdy table may be used. Tools should be kept in a divided box and be made available only under teacher supervision and after specific instruction in their use. Children should be taught to return each tool to its proper place.

Plastic containers, ice cube trays, and muffin tins are among the containers suitable for storing nails, screws, and other small items. Wood and related materials can be selected more easily if classified by size, shape, or type before storing. Transparent plastic bags, labelled boxes, or sturdy trays can facilitate orderly storage arrangements. Accessibility of materials provides opportunities for thoughtful selection. Strong cartons of uniform size may be used for storage of partially completed constructions. Cartons may be made attractive by painting them to harmonize with the color scheme of the room.

If oil-base paints, shellac, and cleaning solvents are used, they must be kept in metal cabinets because of fire hazard. Children should be closely supervised when using these materials.

Rotating committees may be trained to check equipment after each session to see that (1) tools and small materials are in their proper places; (2) wood and other related materials are stored in the area provided; (3) brushes are thoroughly cleaned; and (4) finished and unfinished work is marked for identification and carefully put away.

The nature of the activity makes it advisable that only small groups of children share materials, tools, and work space at one time. Groups may be rotated so that each child will have an opportunity to gain experience in this field of design.

Experimenting with discarded plastic containers

Teaching Procedures

The child should be guided to attempt only those constructions that he will be able to complete with satisfaction. While he is working, his experiments are to be guided and evaluated by the teacher. He may be asked questions that lead him to consider the design of his arrangement as he views it from all sides. Some criteria to direct his judgment are: (1) interest through variety; (2) balance through placement and stability; (3) simplicity in formation of mass; (4) attractive contours or silhouettes; (5) effective patterns of light and dark created by surface planes, shadows, spaces, and at times, the

Transparent containers and labeled boxes provide orderly storage introduction of one or two colors; (6) pleasing relationship of proportions; (7) satisfying combinations of smooth and textured surfaces; and (8) unifying elements, such as overlapping of parts, repetition of line, and structural bridging or unifying various parts of a construction.

Watching the nail as she hammers

It is important that children have many opportunities to use claw hammers to imbed large-headed nails into soft pieces of wood so that they may develop control in handling this tool, as well as enjoy the challenge offered by the resistance of the material and the physical activity involved. Before a child uses a hammer, the teacher should show him that the tool functions better when he holds the handle firmly below the center; also that if he watches the nail head and not the hammer as he strikes, he is less likely to hit the fingers with which he holds the nail.

As it becomes necessary for children to use other tools, such as a handsaw, C clamp, or clampette, and for more advanced work, pliers, snips, automatic spiral drill, and screw driver, they should be shown the safe way to hold each tool. Each tool has its own kind of work to do and may be damaged if used incorrectly. Tools given to children for their experiences in constructing with wood should be real tools, not toys. A selection of appropriate tools may be made from the G-1 Supply List.

Tightening the "C" clamp

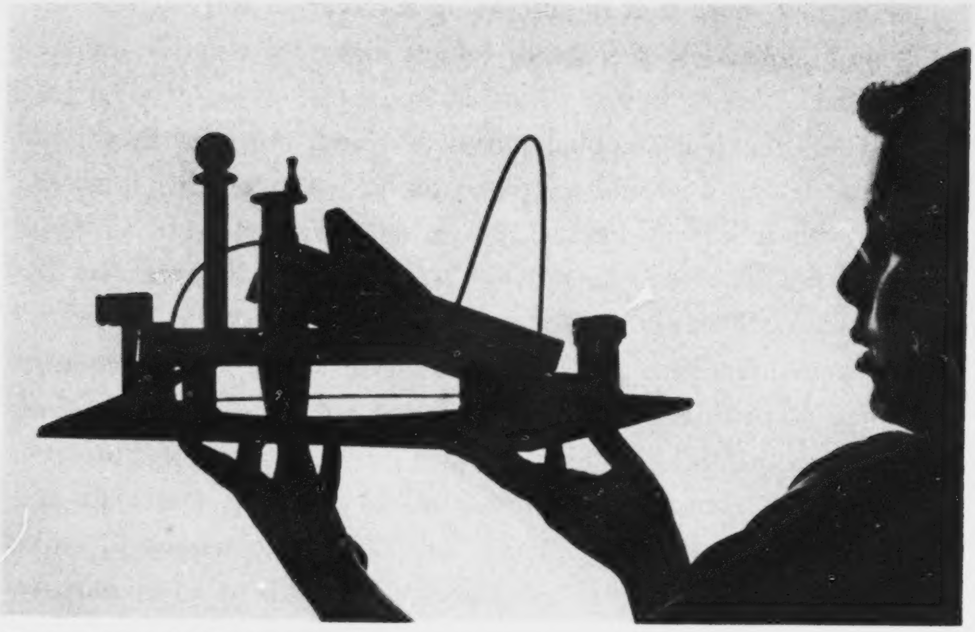
Soft woods, such as pine, poplar, and basswood are best to use for construction because nails penetrate them easily. Nails that are long enough to join pieces of wood securely, and yet not go through the other side of the second piece, should be used.

Woods and other materials that cannot be nailed together may be joined with an all-purpose glue. The table or workbench top should be protected by newspaper during the gluing process. The child should be guided to spread the glue thinly and evenly over the surfaces to be joined. The glued pieces should be kept under pressure until the adhesive has set.

When a piece of wood is too long for his purpose, the child may use a ruler and pencil to mark off the desired length. He may then use a hand saw to cut the wood. For more complex constructions, children will find that screws and screw drivers are needed. Specific kinds of tools and materials for various constructions are described in the sections for the various grade levels that follow.

In finishing a wooden construction, rough edges and surfaces are smoothed with sandpaper. Since constructions are often made of assorted types of wood, children may find it desirable to paint them. The teacher should advise children to choose one basic color that will give unity to their designs. An additional color note may be introduced for emphasis or contrast. Water-base flat colors give a good finish and simplify clean-up problems.

Children should solve their own problems of design and construction. Suggested questions for evaluation are given for each grade level. Recognition should be given for original ideas and sustained effort,

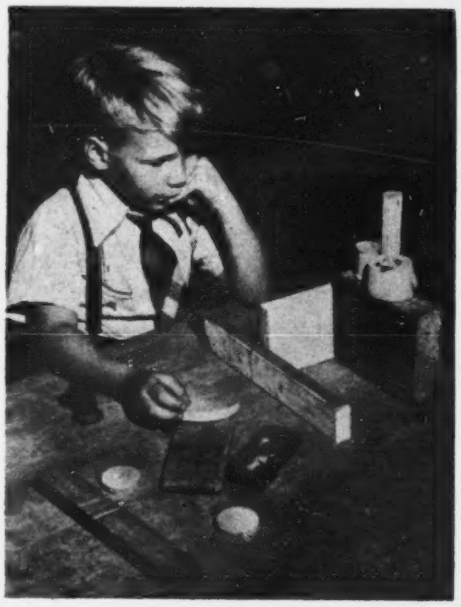


Evaluating a finished construction

even if end products may seem crude by adult standards.

When children have had many opportunities to experiment, they are ready to design and construct objects that require some preplanning. Materials at hand will invite invention through manipulation and combination of shapes and forms. At this point a child may find it necessary to make modifications to meet the requirements of his plan. He may make original cardboard patterns to permit modifications before cutting into the wood. Quick sketches of his proposed projects may help the child clarify his thinking.

Through repeated experiences in designing and constructing with wood and related materials, the child gains control of the materials, the tools, and the processes involved. The forms he makes need not be complicated. Stress should be placed on simple, well-constructed forms. Often the appearance of an arrangement may be improved by the removal, rather than the addition, of pieces of wood.



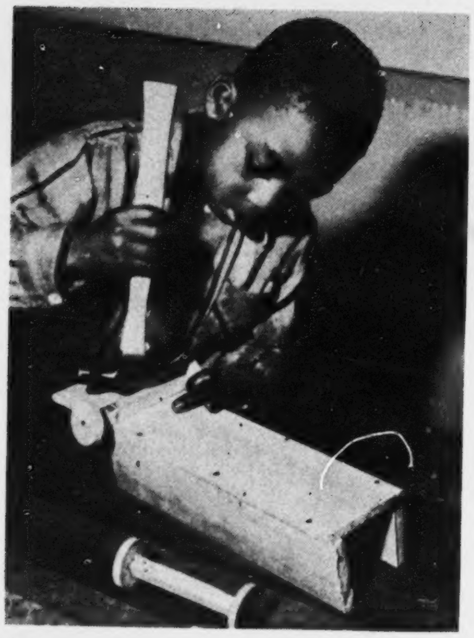
Making an experimental arrangement

Suggested Experiences

Grades K-2

The young child should have many opportunities for handling ready-cut pieces of wood. He will work best with a limited selection of materials. The teacher guides his choices from an assortment of wooden pieces, such as scraps, beads, "popsicle" sticks, tongue depressors, narrow splints, two-inch and four-inch disks. Smooth, soft wood will often offer opportunities for sawing. The child's initial experiences should include specific instructions in the use of hammer and saw.

The child may begin to arrange his selected pieces by placing them on top of or next to others. As he does this, the teacher guides him to consider the size and placement of parts in relation to the whole design. One may ask, "Is this piece the right size for that spot? . . . Is the arrangement well balanced or might it topple over?", or may then suggest that he try other arrangements, discarding shapes or introducing new ones. It is important for the teacher to recognize that when a pupil considers, accepts, or rejects ideas, his creative thinking is stimulated.



Using a hammer correctly

Young children will combine pieces of wood, much as they build with blocks, trying a circular piece on top of a square, two spools on a rectangle, or piling up other shapes in trial arrangements. Children should not be asked to name these arrangements. Remarks by the teacher, such as "You are finding new ways to build with your pieces," or "Does your arrangement look well from all sides?" will encourage the child to do further thinking and inventing. Guidance of this kind, through which the child is encouraged to build non-realistic constructions, gives him time to develop control in handling materials and some ability to use them creatively. The child who wishes to make a permanent arrangement will use hammer and nails or an all-purpose glue to join the pieces.

Children are eager to use tools. Some young children get so much satisfaction from the physical activity of hammering that they are content for a time to do nothing but hammer nails into a block of soft wood. Their attempts to hit the nail squarely will develop the hand-eye coordination that will be needed when they attempt constructions.

When children have had several experiences in fashioning non-realistic arrangements, the teacher may encourage them to find a likeness to some familiar object in one of their constructions. They may add details to emphasize the resemblance. This stage relates to the discovery phase in painting in which the child is challenged to use his imagination.

After many experiments, some children may wish to make recognizable forms. Previous experiences in design will help to give variety to their work. They may invent shapes to complete a wagon, boat, train, or castle. To make these articles more pleasing in appearance, children may wish to use paint to cover differences in wood color and to give unity to their designs. Children should be guided to

Using color to unify parts of a construction select and use a few colors to enhance their design. Water-base flat paint gives a desirable finish.

Small wooden and plastic boxes will interest some children, and by their sizes and shapes will suggest some arrangements for them to make. They will find original ways of using these materials in combination with others. Learning takes place as the teacher asks pupils to evaluate their experiences. "What is the safe way to use a hammer? . . . How do we keep our work bench in good order? . . . What new ways have you found to join your pieces? . . . Where do you see a color that has been repeated?"

Grades 3-4

Children in this age group are inventive, show a natural sense of design, and because of their better manual control will be more skillful in using hammers, nails, and glue. They too will need time to experiment with shapes of wood and other materials. These children will be alert in finding varied shapes that may stimulate imagination and fantasy. As they experiment, they will sense the varying qualities of materials and judge the suitability of their combinations. They should have many opportunities to arrange and re-arrange their selected materials before attempting to make a permanent construction.

A child may want a shape that is not available among the ready-cut pieces. He may then select a length of soft wood and cut it to the desired shape. At this point he will need instruction in the safe handling and use of a hand saw. When the child is ready to make his arrangement permanent, he may use nails or an all-purpose glue, or combine both methods of joining in a single construction.

Using a saw the safe way

As the children turn their partially completed arrangements and study them from all sides, the teacher guides them to see if they can discover fanciful forms, such as imaginative birds, animals, or figures. Children may add details to clarify these emerging forms.

As they work, the teacher guides them through questioning: "How can you arrange your pieces so that your construction reaches upward? . . . What part of the arrangement attracts your attention? . . . Is this part near the center? . . . Are there some open spaces in your design?"

Gradually the children show an interest in planning and constructing for useful or ornamental purposes. Some children can create simple, workable games. Toys with movable parts appeal to children of this age. Third and fourth-grade children are more concerned with the appearance of their finished products than younger children are. They will be more skillful in using sandpaper to smooth rough surfaces. Textures may be varied by contrasting smooth against rough surfaces. Scratching or imprinting with nails and hammer offer possibilities for experimentation with various textures. Surface treatment may be further varied by imbedding nails, brads, "U" tacks, and other small metal objects. Good design demands selectivity and restraint in the use of textural effects.

Making a base for a pull toy

Grades 5-6

At this growth level, many children are ingenious in planning original constructions and are fairly competent in the use of tools. Their increased skill enables them to manipulate and assemble more varied related materials in more complex types of construction. They are better able to fashion joinings and to attach pieces so that the fastening becomes a part of the total design. They are more skillful in using colors for decorative purposes.

Those children who have not had sufficient preliminary experiences in experimenting with constructions will need ample opportunities to do so. These experiences will stimulate the children toward more varied ideas and develop their confidence in the use of tools and materials.

Hand drills and screw drivers can be added to the tool box after specific instructions have been given as to their correct use. The drill is used for boring holes and has adjustable jaws into which twist bits of various sizes may be inserted. It may be used to create interesting patterns and pierced surfaces as well as to cut holes into which dowels or pegs may be inserted.

For the more sturdy types of construction in which nails are not adequate, children will need to use screws and screw drivers. Here too, care must be taken to see that the screws are long enough to hold parts together, but not so long that they extend beyond the pieces to be joined. A small hole, made with a nail or an awl, will help to start the screw on its way.

These older children will also be able to discover a wide range of imaginative and decorative forms suggested by oddly shaped scraps of wood combined in experimental groupings.

The child who has had ample opportunities for experimentation and discovery with construction materials is better able to plan specific articles. After looking over the available materials, he may decide on what he wants to make and preplan his construction. The child's plan may grow as he works or he may find it advisable to make a little sketch to visualize his ideas. He will enjoy making toys, doll houses, villages, and decorative pieces, such as figures of animals, birds, and people.

Fifth and sixth graders who have completed a construction will need to consider appropriate types of finishes. Color can be used to enhance design. Previous experiences in design painting may be recalled as the child plans color areas to achieve contrast, dominance, balance, repetition, and variety. Woods of various colors and finishes can be unified by the application of a single color. This may be tempera or any other water-base flat paint. Pupils may voluntarily supply paint in spray cans. This paint will readily cover delicate constructions. The article to be sprayed should be placed within an open carton that is placed on its side. This precaution will confine the sprayed paint within a limited area. If the wood has interesting grain markings, wax or clear shellac may be used rather than paint.

Balancing forms and colors

At every stage of the child's development in constructing with wood, the teacher should guide his growth in ability to make art judgments. Teacher's questioning should pertain to originality, color, texture, design, and craftsmanship. Typical questions might include the following:

"Do your selected materials vary in size, shape, and texture? . . . Which pieces do you like best? . . . How do you plan to use them? . . . Have you moved your shapes around to explore all possible arrangements? . . . Have you looked at your arrangement from all sides? . . . Is each piece just where you feel it belongs? . . . Does your design have a leader? . . . Who has discovered a new way of joining pieces? . . . Are they joined securely? . . . Have you left open spaces in your construction where your eyes and imagination may wander? . . . Would color add beauty to your construction? . . . Where would you like to use it?"

CHAPTER NINE

Puppets and Puppetry

The magic world of puppetry, in which birds and animals can talk and act like humans, and fairies and story-book characters come to life, appeals to all children because of their own lively imagination. The puppet and his antics can transport the child into the land of make-believe, projecting him into many different situations and environments from which he can learn a great deal.

It is a gay, exciting adventure for children to participate actively in making, costuming, and manipulating these fascinating little characters. It is equally interesting for them to design and construct settings for the final dramatic production.

The child actually "lives," for the time, the character he is creating and gives the little form a personality that will make it seem real. He gets a deeper understanding of many kinds of people and the way they act under different circumstances. At one time, the child may become a king or a wicked fairy; at another time, a daring explorer or a fun-loving clown. The way he interprets and expresses the personality represented, the words and actions he gives the puppet, reveal his real understanding of the character.

Children express themselves through puppets

Puppet dramatizations, especially those in which the children are encouraged to make up the dialogue about everyday happenings in the home, school, and neighborhood, provide emotional release and give the teacher an insight into the interests, abilities,—and personality traits of individual children, and help in guiding them more effectively.

The many art experiences involved in the puppet activity offer the child opportunities to form art judgments and to develop ability in the use of a variety of materials. Selecting appropriate colors, materials, and textures helps develop good taste and increase resourcefulness and ingenuity. Imagination and creative thinking are stimulated as the child uses the materials he has chosen to design the costume, stage, or stage settings.

The strong appeal of puppetry, involving the child's wholehearted projection of himself into the dramatic situation and the concealment of himself from the audience, often overcomes speech or personality difficulties. It increases interest in crafts, and gives opportunities achievement even to those with limited manual coordination.

Materials

Children must understand that puppetry is a cooperative activity in which they will share materials as well as ideas. A discussion well in advance of the puppet activity will allow time for children to collect materials so that the work, once started, will progress smoothly. Different types of materials may be sorted and placed in boxes so that selections may readily be made. Responsibility for order and good judgment in the storage of supplies is a valuable educational experience.

Some of the materials that children will find appropriate for making puppets are:

socks, cotton stockings, mittens, gloves
pipe-cleaners, thin wire
buttons, beads, jewels, sequins
rope, yarns, steel wool, wood shavings
fur, satin, silk, brocade
calico, gingham, plain and printed materials

feathers, trimmings
cotton, kapok, shredded foam rubber

For backdrops:

wrapping paper, cardboard
window shade, muslin

For stages:

large table, large cartons
wooden boxes, folding panels
cloth draw-curtains
colored lights

Teaching Procedures

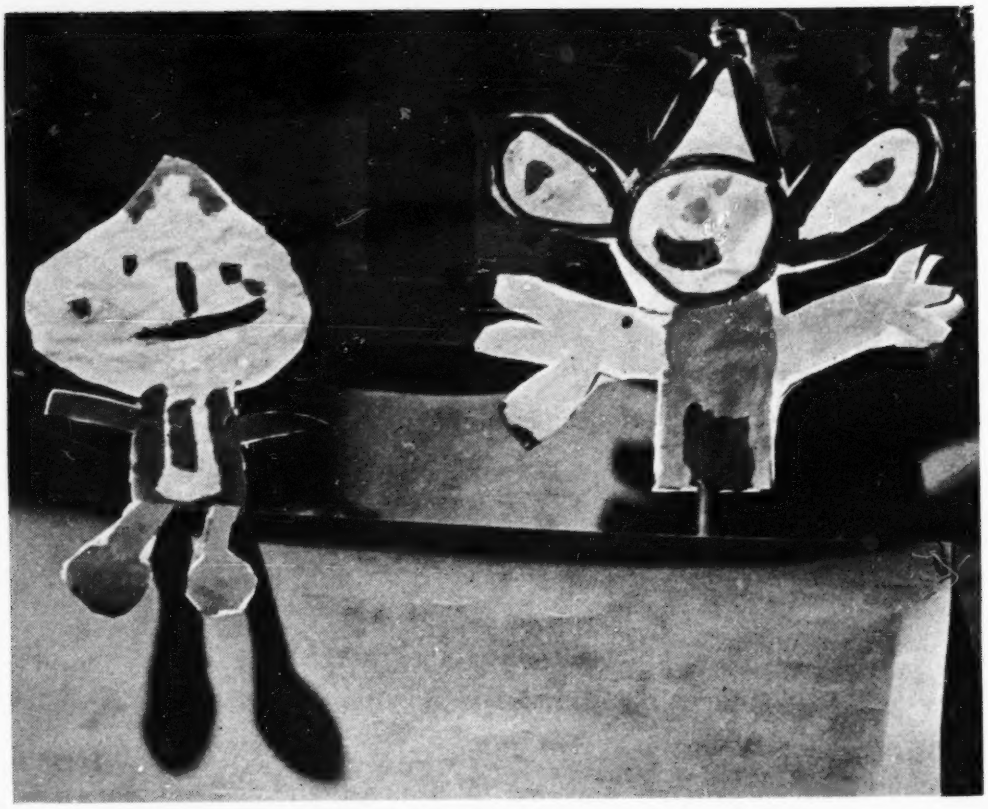
Observing a lively puppet character, presenting a fist puppet, modishly attired in a handkerchief, recalling a favorite television puppet, or discussing a recent puppet performance may stimulate imagination and motivate children to launch their own production.

With their limited ability, younger children will enjoy making simple paper-bag puppets; the older ones who have had previous experience in puppetry, will find a challenge to their constructive ability and an outlet for their individual ideas in the mitten-type puppets with flexible joints or those with heads made with papier-mâché. They may even devise puppet heads from boxes, cans, or other found objects. As they work, children gradually acquire ability to modify the construction in order to make the puppet easier to handle and more expressive in action.

Puppetry provides opportunities for the child to experiment and make judgments in planning and producing a play. Some of the best puppet plays are those written or spontaneously acted by the children. Sometimes young children design original puppets first and then cooperate in the development of a play that evolves as the little "actors" come to life. Older children may write an original script or engage in research to find one. They will create the puppet characters as described in the script. The play should be short, full of dramatic action, and challenging to the ingenuity of the group. The teacher will guide the dramatization so that each child will have a chance to use his own puppet in a production and to share in the over-all planning.

When a play has been selected or written, and all the aspects of the problem have been considered, children may volunteer for working groups. Some will make the puppets and costumes; others will design and construct the stage, the backdrop, and any properties that may be needed.

The teacher will guide the children in the selection of the type of puppet construction best suited to the age, ability, and previous experience. With continuous opportunities to build on previous learnings, the children should become more independent in under-



Drawings or paintings are used for stick puppets

taking projects, more resourceful in the use of materials and textures, and more ingenious in creating expressive characterizations of their own. While it may be necessary for the teacher to guide the child in developing a new or basic process in puppet making, the child should create his own characterization, and not copy a sample, picture, or ready-made pattern.

Before the child begins to construct his puppet, he must consider the personality or character traits with which to endow it. Since the puppet's head and features establish its character for the audience, the head is usually exaggerated in size and the most typical features are stressed.

Children will discover that eyes, nose, and ears, for instance, may be built out with gummed paper, painted or sewed on, appliqued with pieces of felt, or modeled from papier-mâché, depending on the type of puppet under construction. While making the puppet head, the child should turn it frequently so that all views contribute to the characterization. Color plays a very important part. In experimenting with color, children may find that a drab gray-green, used as flesh color for a wicked goblin, may emphasize his menacing character; soft pink and white tones will add to the appeal of a fairy princess.

When the head of a puppet has been completed, the child will further develop the characterization by making a suitable costume. This should be carefully designed, using previously selected materials. A personal selection of the colors and textures is an important factor in developing art learnings and judgments. Costumes for paper-bag puppets should be made of paper, while cloth is appropriate for the sock or papier-mâché types.

Since color has a powerful influence on the mood for a dramatic presentation, children should consider color relation of costumes to backdrops, remembering that strong color contrasts are necessary for visibility and relative importance. After some experimentation, the colors which are finally selected should create a harmonious and dramatic effect that will interpret and intensify the mood of the play.

The educational value of puppetry is lost and the child's enthusiasm wanes unless the activity culminates in a dramatic performance. There are many simple ways of staging a play. Appropriate songs and musical accompaniments of drums, cymbals, or record player will heighten the interest in most productions and add to the learning experience.

The relation of the stage setting to the puppet characters must be considered in order to secure the best dramatic effect. The stage setting or backdrop should be subordinate to the puppet actors, yet should establish the place and time, and contribute to the atmosphere of the play.

Puppets are symbols, often exaggerated. It is not necessary, therefore, or even desirable, for the plays to have a realistic setting. Usually a few suggestive shapes, such as a "stained glass" window of colored cellophane for a church, or a fence and fields for a farm, can provide dramatic effects. Painted people or animals on a backdrop detract from the puppet-actors. Types of puppet stages and ways of concealing the puppeteers are described in the sections that follow, on the various grade levels.

When the puppets and stage settings are completed, a few rehearsals are necessary to determine the color arrangements and dramatic movement of the characters on the stage. To emphasize the main characters, children will need to group and re-group puppets which appear together in a scene. This is exactly what they do in their paintings when, through color contrast and placement of the colored shapes, they bring out the main ideas.

(The developmental stages of growth in puppetry are shown on pages 151, 152.)

Suggested Experiences

Grades K-2

To realize the strong appeal puppetry has for children, the teacher may animate a little puppet and see all eyes sparkle with interest and excitement. Puppets that dramatize familiar situations in the home, school, and community impress on young children desirable attitudes and ways of doing things in everyday life. To make an imaginary or favorite story-book character "come to life" through the animation of the puppet is a thrilling experience for children.

Puppetry in kindergarten and grade one is primarily a dramatic play activity rather than a creative art activity. Children in these grades benefit from making simple puppets from a square of cloth, a paper bag, or a drawing mounted on a stick.

The making of hand puppets does not begin until the second grade. Even for children in this grade, dramatizations need not be elaborate.

They should have plenty of action and a limited number of characters. Spontaneous dialogue is more expressive and entertaining than memorized lines. The puppets should be simple in construction and in costuming. The young child has a vivid imagination and often a single costume accessory will indicate the character he is trying to express. If an Indian is to be portrayed, one child may use a colorful headdress, while another may be more interested in the painted face or the colored blanket. Whatever the character, it is the child's thinking, selecting, and planning that gives the activity educational value.

There are many easy ways to stage a puppet production. One very simple and satisfactory type of stage may be improvised by tacking a heavy cloth or curtain across a wide closet door and extending it high enough from the floor to hide the children who manipulate the hand puppets. The backdrop can then be tacked on the wall behind the children.

Another type of stage may be made by merely turning a table on its side to screen the children seated or crouched behind it. A piece of plain-colored cloth may serve as a backdrop on a tall screen placed behind the puppeteers, or symbols to indicate a particular locale, such as garden, forest, or castle may be painted by the children on an old window shade or a large sheet of paper. The backdrop should be very simple and in color tones that will permit the puppets to be effectively seen against it.

Several types of puppet that are suitable for the young children are described in the following sections.

Puppets Made From a Square of Cloth

The child will find that a piece of cloth put over his fist and fastened at the wrist is all that is needed to improvise a simple puppet head. A bit of contrasting cloth wound around the top may represent a turban or a hat and another long piece attached with a string or rubber band at the wrist will serve for a cape, a dress, or a suit. While this type of puppet is very satisfactory for improvisation and a good introduction to puppetry for young children, its use should not be continued for too long because it lacks the satisfaction of permanency and allows limited opportunity for animation.

The Flat, Jointed Puppet

Impromptu and interesting dramatizations can be done by using figures of animals and people which the children draw and cut out in duplicate. The children can solve the problem of making the back as well as the front of the little puppet and can devise ways of fastening them to a thin, flat stick or splint so that the whole figure can be moved up and down, around, and back and forth. From his early attempts, the child can discover how to make one or two parts of his cut-out figures move independently. To make the tail of an animal-puppet move, the child may cut off the tail and re-attach it loosely to the body with a paper fastener. A thin dowel stick or umbrella rod, attached to a movable part, allows the child to pull it at the desired moment to make the bird sing, the rabbit's ears wiggle, or the clown do a little dance.

The more skillful child may draw the parts separately, allowing a little extra length or width for overlapping, and then assemble the puppet with paper fasteners. He will delight in the paper puppet's animated performance. In their puppet making, as in their drawing, children naturally create symbols of people, animals, and things, rather than represent them realistically. With experience, they will grow more skilled in expressing their ideas and bringing puppets to life.

Paper Bag Puppet

The paper bag puppet is easy to make. By putting one hand into an open bag and holding it tightly around his wrist with the other hand and moving the bag, the child quickly learns how to make and animate a paper bag puppet.

The portrayal can be made vivid by exaggerating important characteristic features of the animal or person. Children can experiment with gummed paper to build out characteristic features such as eyes, ears, nose and teeth. Such variations of contour make the characters more recognizable and convincing when the puppets are turned in profile. Simple costumes and accessories, designed and made by the children from various textures and colors of paper, will add to the characterization.

Sock, Stocking, or Mitten-type Puppet

A sock, stocking, or knitted mitten, because of the shape and elasticity of the material, has great possibilities for use in creating original puppets to portray people, animals, birds, and other real or imaginary creatures. Children can experiment by manipulating hands and fingers in the rounded end of the sock, stocking, or mitten to discover the possibilities for creating puppet characters.

Children who want to make puppet "people" can use the toe, heel, or top of the sock or stocking to form an oval or rounded shape for the head. The head can be loosely stuffed and a cardboard core or paper tube fastened in the neck to permit insertion of the index finger for manipulating the puppet. Children will discover that expressive features may be made from various materials, such as buttons, felt patches, wool, ravelled rope, wood shavings, or fur. Costumes may be fashioned from the sock itself or from cloth, in textures and colors which will give the best characterization to the puppet. Children can determine where to cut the armholes through which the thumb and little finger can be poked. The two fingers serve as arms and the index finger inserted in the tube hold up the head and allow the child to make the head nod, shake, and bow. The more flexibility and coordination the child develops in using his fingers, the more effective will be the dramatic action.

Grades 3-4

In the progressive development of the puppet activity, the children at this level are able to give greater expressiveness to the types of puppets developed in earlier grades. Stitchery or shapes of felt may be used to suggest three-dimensional features on sock, stocking, or mitten-type puppets. These should be so designed that the characters will be equally effective when viewed from any angle. The simple mitten-type costume is excellent for most puppets. This is a simple tubular shape with short kimona-type sleeves and an open neckline designed to accommodate three fingers of the puppeteer. The child may make his own paper pattern, considering width and length needed as well as an allowance for seams. He should leave ample room for free, easy, finger movements. The material should be long enough to hide the puppeteer's arm. To add to the expressiveness of the characterization, children can experiment with colors and trimmings to see which best contributes to the design and dramatic quality. Some children may wish to develop the costume further. They will find out that a piece of double material can be sewed at the waistline and shaped to give the appearance of trousers or skirt. When attaching trousers, the blouse must be left free for the insertion of the child's arm to manipulate the puppet. When legs are added to the puppet, it will be necessary to make a sleeve of dark material to cover the arm of the puppeteer in order to maintain the illusion of reality for the audience. The child will find that pieces of cardboard, cloth, or felt are excellent for fashioning hands, legs, and feet.

Exaggerating important accessories

Puppet Heads of Papier-Mâché

Third and fourth-grade children who have had experience with the simpler types of puppets may be interested in modeling puppet heads of papier-mâché. They may use a wad of newspaper, a rubber ball or a stocking darner as a base. The base should be covered with a large piece of waxed paper or pliable cellophane. This can be held in place with string tied around a cardboard core at the neck area. A paper towel placed over the waxed paper and also tied at the neck area will serve as a base for additional reinforcement.

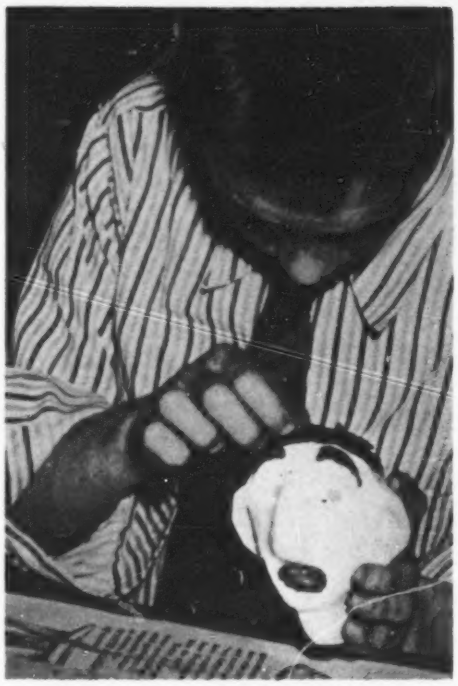
Six to eight strips of gummed paper tape, long enough to reach from neckline to crown of the head shape and back to the opposite side of the neckline, can be overlapped to form a sturdy-ribbed foundation for the papier-mâché. Short strips, approximately ½" wide, torn from newspaper or paper toweling, and saturated with a thick mixture of flour or wallpaper paste, are overlapped, first in a horizontal direction and then vertically, to form a shell eight to ten layers thick. A strip of fabric may be inserted between the layers at the lower edge of the neck. Later the costume may be attached to the neck.

Before the head is thoroughly dry, the back should be slit. This will permit easy removal of the inner base when the papier-mâché is dry. Several horizontal layers of short strips of papier-mâché, that overlap and cover the slit, will rejoin the open edges and form a strong seam.

Features of the face and head can either be painted on the dry, rounded form or modeled from small masses of a thick, doughlike paper mixture. These are applied to the surface and attached with small strips of papier-mâché. A thick, pliable mass for modeling can be made by adding small, torn bits of porous paper napkins or tissues to a thick mixture of flour or wallpaper paste. The child can select and use any material for hair, headdress, or costume that is suited to the characterization and the total design.

First attempts with papier-mâché will seem crude in construction and painting, but the satisfaction the child gets from creating his own characterization will be lost if adult concepts are imposed or realistic perfection is emphasized.

Just as color adds to the expressiveness of a puppet's characterization, it also contributes to the dramatic appeal of stage production. Children may design a backdrop by drawing, painting, or fastening colored shapes on a large piece of wrapping paper or cardboard, a discarded window shade, or piece of muslin. The length and width of the backdrop will be determined by the space in which it is to be used as well as by the size and number of puppets to be viewed against it. The colors selected for the backdrop may enhance the mood of the production and increase the expressiveness of the puppet players that will be seen against it. A few simple props may be used when they do not interfere with the free movements of the puppets.



Completing expressive puppet heads

A temporary puppet stage may be improvised, using an open closet doorway or a large table, turned on its side, as described in "Suggested Experiences, Grades K-2" in this manual.

Grades 5-6

Children on this grade level have a wide variety of background experiences. For those with little or no experience in puppetry, the teacher should encourage them to start with the simpler types of construction suggested for the third and fourth-grade level, always including dramatization as part of the experience. The children will get many new ideas and may begin to plan other types of construction.

These older children may find that puppets with papier-mâché heads and mitten-type costumes are well suited to many of their purposes. Direct modeling in papier-mâché is recommended because it is a pliable medium and is therefore particularly useful for modeling expressive features. The mitten-type costume which was suggested for use in the third and fourth grades may be used even more effectively by older children whose craftsmanship will be better and whose judgment in selecting colors will be more competent. The children may also devise puppet heads from boxes, cans, and other found objects. Children will enjoy "inventing" different ways of fashioning hands and feet for puppets, using various kinds of materials and constructions. Weighting the feet with pebbles helps to make the leg action more natural.

Jointed construction and movable parts are excellent for animal or bird puppets. The head of an animal or bird may be modeled of papier-mâché. Before the papier-mâché is entirely dry, the children may devise a way of moving the jaw if they wish to give greater reality to a lion's roar or a dog's bark. The color used to set the mood of the play, the costumes of individual puppets, and the backdrop must be considered together from time to time to make sure that the puppets will be clearly emphasized against a contrasting background. After the children make their choices of costume and colors, considering them in relation to one another and to the backdrop, they may discuss the effect and make adjustments in color that will better emphasize the main characters and create a more striking and harmonious performance.

A puppet show is a cooperative venture

When children feel that they want to know more about a particular costume, they may need to do research; the design of the costume, however, should be a creative expression based upon their own interpretation of the dramatic situation.

The backdrop should be simple and include only the few forms necessary to set the locale and contribute to the atmosphere of the play. Colored lights, singly or in strings, or colored Cellophane may be used to create or change a mood, show the time of day, or suggest the season. Through experimentation, children will discover ways of suggesting sunshine, moonlight, or storm. They may find that a string of Christmas tree lights with blue bulbs, used as footlights, gives the effect of moonlight or "eeriness," while yellow lights bring morning sunshine to the same scene. Children become fascinated with the variety of changes which occur in the color of costumes and scenery through the use of colored lights. When cellophane is used it should be framed with cardboard and held about three inches in front of the light so that the bulb will not burn it.

Children delight in selecting appropriate sound effects and musical accompaniments to be used before, after, and during the performance to heighten expectancy and add to enjoyment.

Cooperation is the keynote of every successful production. The children quickly learn the need for dramatic timing and the necessity for making all parts works together. Because of their increased knowledge and skill, and their greater dexterity in manipulating puppets, children of this age level are capable of giving a more finished performance than younger children. The action should be lively, but when one puppet is "talking," the other little characters should be quiet and seem to be listening.

Constructing a Puppet Stage

At this level, children are able to construct a puppet stage of wood. The stage should be shallow and scaled to the size of the puppets so that the characters have enough room to perform and to be clearly visible to the audience at all times. Elaborate decoration should not be used on the stage-front opening or "proscenium arch" as it detracts from the effectiveness of the puppets. A draw-curtain of heavy material will complete the stage setting and will provide opportunities to make changes in props for the various scenes.

In designing the stage, the children should make sure that space for the backdrop is larger than the procenium opening, to take care of the sight lines from all parts of the room and to maintain the illusion for the audience. The simpler types of puppet stages suggested for the earlier grades may also be used at this level, but the older children can be expected to make more effective stages.

Whether the stage is improvised in a classroom doorway or designed and built of heavy cardboard or wood, teachers will find that puppetry offers valuable experiences that are very satisfying to children. The child gradually learns to work happily with others and to develop a sense of responsibility for his part in a harmonious production.

Learning to be a puppeteer

Explanatory Note

Research studies of children's art work have shown that there are stages of growth and development through which children pass. The art program is based on the finding that children learn best by experimenting with materials and that children gain the confidence to think, feel, and express themselves when they are given time to work at their own pace and in their current developmental stage. It has been found that some children pass rapidly from stage to stage while others have periods of little or no apparent progress.

Each art activity is described in stages of development. It should be understood that stage one does not correspond to grade one, etc. Similarly, a child who is in an advanced stage in one art area may not be equally advanced in another area. The names of stages highlight specific advances in ability. In the description of the various stages, details are given in terms of what the child does. The child's learnings and activities at each level are cumulative and represent combined emotional, mental, manual, and aesthetic growth.

Developmental Stages in Art Activities

Stages	Painting	Drawing	Modeling With Clay	Designing Posters
1	Manipulative and Exploratory	Manipulative and Exploratory	Manipulative and Exploratory	* *
2	Intuitive Design	Circular Configuration	Intuitive Design	* *
3	Conscious Design	Schematic	Conscious Design	Deliberate Design
4	Planning and Organizing	Planning and Organizing	Preplanned Design	Planning and Organizing
5	Expressing Near and Far	Expressing Near and Far	Modified Design	Modified Design
6	Increased Realism and Expressive Design	Increased Realism	Craftsmanship and Expressive Design	Ingenuity and Dramatic Simplicity

Stages	Building With Blocks	Working With Paper, Cloth and Trimmings, Wood and Other Materials	Puppets and Puppetry
1	Manipulative and Exploratory	Manipulative and Exploratory	* *
2	Intuitive Design	Intuitive Design	* *
3	Deliberate Design	Deliberate Design	Deliberate Design
4	Preplanned Design	Preplanned Design	Preplanned Design
5		Modified Design	Modified Design
6		Craftsmanship and Expressive Design	Craftsmanship and Expressive Design

Painting

Stage 1. Manipulative and Exploratory

Discovers the many things that can be done with a wide bristle brush and water on the blackboard, or with paint on large paper.

Begins to show control in handling of brush and water or paint.

Makes own choice of one color from a range of bright tempera colors.

Is more interested in physical activity of painting than in visual result.

Paints varied types of brush strokes—separate, connected or winding—and masses of color, as a result of experimentation and fluid nature of material.

Stage 2. Intuitive Design

Paints lines and shapes with an intuitive sense of design. Gradually increases number of colors used.

Stage 3. Conscious Design

Thoughtfully paints lines, shapes, and colors. Is aware of their relationship in the design or picture.

Sometimes discovers in painted shapes likenesses to real or imagined objects.

Clarifies the idea with additional lines, shapes, and colors.

Chooses colors more sensitively.

Makes more deliberate use of entire area of paper.

Stage 4. Planning and Organizing

Plans the idea and placing of important parts of the design or picture.

Uses more varied color combinations.

Makes more thoughtful use of contrast in light and dark, plain and textured areas.

At this stage there is marked difference between children's paintings. Some children are visual-minded and emphasize the realistic appearance of things. Some are more subjective and emphasize design, color, and a personal quality. Others combine the two types.

Stage 5. Expressing the Near and Far

Overlaps shapes in a painting in order to express space and near and far relationships.

Uses contrasts in light, dark, color, and textures to make overlapped parts clearer.

Shows more expressive use of observed characteristics.

Mixes and discovers the wide variety of color tones that can be made from any one color.

Shows greater sensitiveness in combining these colors in painting.

Becomes aware of colors that appear to advance or recede.

Begins to use this knowledge in subject matter and design painting.

Stage 6. Increased Realism and Expressive Design

Expresses a three-dimensional quality and space relationships by variations of light, dark, and color.

Expresses mood through conscious use of line, shape, and color.

Expresses the essence of a situation because of an increased ability to feel, observe, plan, design, and paint.

Drawing

Stage 1. Manipulative and Exploratory

Manipulates a thick crayon on a flat surface.

Derives satisfaction from motor activity, rather than from visual result.

Draws mainly a tangle of lines.

Later draws lines that tend toward the spiral or circular.

Stage 2. Circular Configuration

Draws separate shapes tending toward tne circular, often in various sizes.

Gets satisfaction from ability to repeat a shape.

With an intuitive sense of design, arranges shapes in space available.

Shows better coordination of eye, hand, and mind.

Stage 3. Schematic

Draws shapes and at first adds straight lines. After drawing, names results as familiar objects. Later, combines and varies shapes, intending to draw a familiar object. Exaggerates or eliminates details, depending upon their relative importance to him.

Uses color and places his objects on the paper with little regard for realism.

Stage 4. Planning and Organizing

Draws separate objects, planning their relation to each other in space:
  a. on a base line.
  b. at different levels.
  c. around a shape.

Often represents objects indicating the parts as they are known rather than as seen; thus, front and side, top and front, exterior and interior are drawn as if they could be seen simultaneously.

Makes further variations of shapes and details to express ideas more adequately.

Uses color with more regard for realism.

Shows closer observation and visual memory.

Shows improved coordination of motor, emotional, and mental faculties.

Stage 5. Expressing The Near and Far

Represents near and far relationships by drawing objects in front of or behind one another.

Draws more realistically.

Makes visible parts of overlapped forms clear by contrasts of light and dark, plain and textured areas.

Preplans sizes, shapes, and colors with consideration for importance and relative position of things in space.

Shows greater integration of observing, thinking, feeling, and expressing.

Stage 6. Increased Realism

Expresses three-dimensional quality of things in space, either realistically or imaginatively.

Solves problems in a personal way through an increased ability to observe, think, feel, imagine, and draw.

Selects those aspects that will best express the essence of a situation.

Modeling With Clay

Stage 1. Manipulative and Exploratory

Rolls, kneads, pokes, and smooths clay, sensing its pliability.

Discovers the many ways clay can be shaped by hands and fingers.

Stage 2. Intuitive Design

Shapes clay into simple three-dimensional forms, usually non-realistic.

Combines clay shapes in simple arrangements.

Sometimes varies the surface treatment.

Stage 3. Conscious Design

Models clay more deliberately, often combining forms.

Sometimes discovers in the forms likenesses to familiar people, animals, objects and to imaginary figures and things.

Makes forms more expressive by varying shape, proportion, and surface treatment.

Stage 4. Preplanned Design

Plans a clay form; determines its size, shape, and type of construction—lump, coil, slab.

Models the form with consideration for permanent construction.

Stage 5. Modified Design

Plans an expressive form.

Uses more complex construction, often combining two or more types.

Modifies design or surface treatment of a clay form to make a more beautiful object.

Stage 6. Craftsmanship and Expressive Design

Models sensitively and with good craftsmanship.

Shows distinctive line quality, expressive form, and contrasts of light, dark, and texture.

Achieves expressional and aesthetic qualities through simplification of the clay form.

Expresses the spirit of the material.

Making Posters

Poster making requires some ability to combine lettering with design and color arrangements. It is not possible for the child to make posters until he has the ability to read and write; therefore, poster making starts in the Deliberate Design phase.

Stage 3. Deliberate Design

Letters words for the purpose of conveying a message.

Often combines a word or words with a pictorial idea.

Stage 4. Planning and Organizing

Plans words and original picture or pictorial symbol to communicate a message.

Experiments with various arrangements of words and a pictorial idea to make a unified design related to the background area.

Considers form and spacing of letters for legibility.

Selects colors to dramatize an idea.

Stage 5. Modified Design

Designs pictorial symbols and plans appropriate words to dramatize an idea in concise form.

Adjusts sizes and placement of symbols and of word areas for more pleasing design or for change of emphasis. Uses only a few well-chosen colors for dramatic effect.

Stage 6. Ingenuity and Dramatic Simplicity

Makes trial sketches for poster layout.

Designs symbols to express essence of an idea in most concise and convincing form.

Shows ingenuity within restraints of good taste in combining line, color, and texture with appropriate letter forms for an effective poster.

Shows increased skill in use of appropriate tools and materials.

Creates posters having distinct individuality and forceful appeal.

Working With Paper

Stage 1. Manipulative and Exploratory

Experiments by manipulating a few shapes and strips of bright colored paper.

Discovers what can be done with them: rolling, folding, tearing.

Stage 2. Intuitive Design

Combines a few colored paper shapes and strips in simple non-representational arrangements that are usually three-dimensional.

Fastens parts together by pinning or pasting.

Stage 3. Deliberate Design

Modifies and combines paper of assorted shapes, colors, and textures.

Often devises ways of fastening parts together.

Sometimes discovers likenesses to familiar articles.

Experiments further to make paper articles or arrangements more expressive.

Stage 4. Preplanned Design

Plans a paper article or arrangement by making a trial construction of newspaper or newsprint.

Selects sizes and colors of paper that are suitable for construction.

Shows more skill in cutting, folding, rolling, and fastening parts together.

Stage 5. Modified Design

Makes a working sketch or trial construction for a three-dimensional paper or cardboard article or arrangement.

Uses a combination of several skills (measuring, folding, cutting, rolling, fitting, and fastening).

Selects materials of suitable colors, weights, and textures.

Makes necessary adjustments as work progresses, to improve design or construction.

Stage 6. Craftsmanship and Expressive Design

Shows simplicity, restraint, and good taste in combining colors, textures, and weights of papers to express an idea.

Shows distinctive use of line, color, and form.

Uses ingenuity in devising original types of construction.

Shows good craftsmanship.

Using Cloth and Trimmings, Yarns and Fibers

Stage 1. Manipulative and Exploratory

Handles various kinds of cloth, yarns, and braids to sense differences in weights and textures.

Manipulates materials to find out what can be done with them.

Stage 2. Intuitive Design

Experiments further with materials.

Shows an intuitive sense of design in choosing and combining materials.

Combines materials by pinning, stitching, or using an adhesive.

Senses suitability of combinations made.

Stage 3. Deliberate Design

Experiments further with basic materials — folds, pleats, gathers them.

Experiments with needle, threads, and yarns on Dixie mesh, burlap, or other basic materials. Invents and discovers various stitches and ways of combining materials.

Weaves or hooks with cords, yarns, or narrow strips of cloth.

Shows conscious control of design and color combinations.

Discovers uses for materials.

Stage 4. Preplanned Design

Preplans a useful or decorative article — stitched, woven, or hooked.

Makes a pattern to determine size, shape, and construction of article.

Experiments with trimming, stitchery, and applique on basic material; considers color, texture, and suitability.

Constructs a simple loom suitable in size and proportion for article to be woven.

Experiments with relative amounts of colors and textures for woven article.

Stage 5. Modified Design

Makes a working sketch or pattern of article to be made.

Makes a cloth, woven, or hooked article using a combination of several skills (measuring, cutting, fitting, stitching, weaving or hooking).

Modifies design and construction as work proceeds to improve usefulness or appearance of article.

Stage 6. Craftsmanship and Expressive Design

Shows distinctive use of line, color, and texture for expressional and aesthetic effects.

Combines skills in designing, measuring, cutting, fitting, *stitching, hooking, and weaving.*

Features details showing ingenuity, restraint, and skill.

Constructing With Wood and Other Materials

Stage 1. Manipulative and Exploratory

Handles a limited assortment of pre-cut shapes.

Senses differences in size, shape, weight, texture, and color.

Stage 2. Intuitive Design

Continues to experiment with a wider assortment of wooden shapes, grouping and regrouping them.

Makes arrangements that are usually non-representational.

Uses hammer and nails.

Stage 3. Deliberate Design

Arranges shapes and "found" objects in compact designs. Sometimes discovers familiar or fanciful forms in the design.

Uses tools to modify shapes.

Nails or glues pieces together to make constructions more lasting.

Stage 4. Preplanned Design

Preplans construction considering materials available.

Selects and arranges pieces to make construction interesting.

Experiments to create patterned and textured surfaces.

Uses suitable ways of joining pieces to make construction durable.

Adds color to enhance the design.

Stage 5. Modified Design

May use own pattern or working sketch.

Makes more sensitive selections from a wide assortment of shapes and linear elements.

Uses appropriate tools with increased control.

Shows increased craftsmanship and resourcefulness in making adjustments to improve design and construction.

Shows good taste in finishing work.

Stage 6. Craftsmanship and Expressive Design

Shows restraint and ingenuity in combining "found" shapes, modified shapes, and linear elements (plastics, metals, reeds, cords, etc.).

Shows sensitivity to qualities created through use of line, mass, proportion, color, texture, open and enclosed space.

Improves in craftsmanship that contributes to perma-

Building With Blocks

Stage 1. Manipulative and Exploratory

Senses the nature of blocks—their simplicity, solidity, permanence—and discovers what can be done by touching, grasping, pushing, lifting them.

Stage 2. Intuitive Design

Combines various sizes and shapes of a basic assortment of blocks, making linear, wall, and floor-type structures.

Begins to discover ways of achieving stability and balance.

Stage 3. Deliberate Design

Works with an increased number and assortment of blocks. Arranges and combines blocks to build three-dimensional structures. Invent ways to enclose and bridge space.

Discovers similarities to real or imaginary structures.

Experiments to enrich the form of a structure.

Shows interest in function and may add toys to complete idea.

Stage 4. Preplanned Design

Plans with others in cooperative projects.

Maintains a personal and creative approach to ideas formed through trips, films, stories, and learning in other curriculum areas.

Modifies design of a structure to reflect increased ability to think, observe, imagine, and build.

Puppets and Puppetry

Stage 3. Deliberate Design

Draws or paints real or imaginary people or animals to create stick puppets.

Drapes handkerchief or cloth over fist to experiment in creating a hand puppet for impromptu dramatization.

Stage 4. Preplanned Design

Designs simple, original puppets from suitable materials, such as paper bags, cloth, socks.

Experiments with size, shape, proportion, and color for head, features, costume.

Creates characterization by emphasizing head and features, and a distinguishing costume accessory.

Manipulates puppet against simple background and in coordination with simple, free dialogue.

Presents simple play to small group or class.

Stage 5. Modified Design

Preplans with consideration of color, size, and importance of puppet characters in relation to each other and proposed background.

Shows more expressive characterization of individual puppets.

Devises heads from such ready made forms as boxes, balls, cans, or models them with papier-mâché.

Shows more ingenuity and improved design in use of materials for costumes and stage settings.

Shows dramatic use of lighting and sound effects.

Develops skill in manipulating puppets.

Improvises a puppet stage.

Stages puppet shows for class or group.

Stage 6. Craftsmanship and Expressive Design

Shows inventiveness and resourcefulness in use of materials in designing puppet characters.

Shows coordinated handling of color and lighting to express mood more effectively.

Synchronizes sound effects, speech, and action with those of other characters.

Uses tools and materials more competently for expressional and aesthetic effects in designing all parts of puppet production.

Constructs a durable puppet stage.

Presents puppet show for school assembly or other groups.

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HARRISON, ELIZABETH. *Self-expression Through Art.* Peoria, Illinois: Chas. A. Bennett Co., 1960.

An introduction to teaching and appreciation.

HOOVER, F. LOUIS. *Art for the Very Young.* Worcester, Mass.: Davis Publications, Inc., 1961.

Art activities for the pre-school child.

HOPKINS, THOMAS. *Integration, Its Meaning and Application.* New York: Appleton-Century Crafts, 1937.

Deals with creativity in the crafts. It defines integration as a development of the whole individual, mentally, emotionally, and manually.

JEFFERSON, BLANCHE. *Teaching Art to Children.* Boston: Allyn and Bacon, Inc., 1963.

One of the best books in its field.

LANDIS, MILDRED M. *Meaningful Art Education.* Peoria, Ill.: Rinehart & Company, Inc., 1951.

Relating to the philosophy of art education.

LOWENFELD, VIKTOR. *Creative and Mental Growth.* New York: Macmillan Co., Rev. ed., 1952.

A clear explanation of the developmental pattern of growth as evidenced in art expression.

McFEE, JUNE KING. *Preparation for Art.* San Francisco: Wadsworth Publishing Co., Inc., 1961.

This book relates psychological, anthropological, and sociological principles to sound procedures for teaching art in the elementary school.

MOCK, RUTH. *Principles of Art Teaching.* New York: Philosophical Library, Inc., 1956.

An interesting account of art experiences in a special school.

READ, HERBERT. *Education Through Art.* New York: Pantheon Books, Rev. ed., 1958.

A scholarly thesis on art as the basis of education.

SCHAEFER-SIMMERN, HENRY. *The Unfolding of Artistic Activity.* Berkeley, California: University of California Press, 1948.

A report of experiments which show that artistic activity is natural to all people and can be developed with the strengthening of critical judgment.

ZIEGFELD, EDWIN, Editor, *Education and Art.* UNESCO. New York: Columbia University Press, 1953.

An international picture of art education.

Crafts

BARFORD, GEORGE. *Clay in the Classroom.* Worcester, Mass.: Davis Publications, 1963.

Contains simply stated, practical information on clay and glaze processes.

BEAUMONT, CYRIL. *Puppets and Puppetry.* London and New York: The Studio Publications, 1958.

A well-illustrated book, including examples from many foreign countries.

BATCHELDER, MARJORIE and COMER, VIRGINIA LEE. *Puppets and Plays, A Creative Approach.* New York: Harper and Bros. 1956.

How to create, rehearse, and present puppet plays.

COX, DORIS and WEISMANN, BARBARA W. *Creative Hands.* New York: John Wiley and Sons, Inc., 1951.

A wide variety of craft techniques explained and illustrated.

DOUGHERTY, JOHN W. *Pottery Made Easy.* Milwaukee: Bruce Publishing Co., 1939.

Technical information about basic processes.

DUNCAN, JULIA HAMLEN and D'AMICO, VICTOR. *How to Make Pottery and Ceramic Sculpture.* New York: Simon and Schuster, 1947.

Simple explanations of clay processes.

GUILD, VERA P. *Creative Use of Stitchery.* Worcester, Mass.: Davis Publications, 1964.

Highly recommended for experiences in stitchery.

HORN, GEORGE F. *Bulletin Boards.* New York: Reinhold Publishing Company, 1962.

Contains some ideas that may be reduced to the elementary level.

—*Posters, Designing, Making, Reproducing.* Worcester, Mass.: Davis Publications, 1964.

Contains some ideas that may be reduced to the elementary level.

JOHNSON, LILLIAN. *Paper Shapes and Sculpture: The Basic Methods and Materials.* New York: David McKay, 1960.

An introduction to working with paper.

JOHNSON, PAULINE. *Creating with Paper.* Seattle: University of Washington Press, 1958.

An excellent approach to the subject.

KARASZ, MARISKA. *Adventures in Stitches.* New York: Funk and Wagnalls, Rev. ed., 1959.

This work is a classic in its field.

LORD, LOIS. *Collage and Construction in Elementary and Junior High Schools,* Worcester, Mass.: Davis Publications, 1958.

Contains grade-level suggestions for creating collages, mobiles, and wire sculpture.

MAGDALEN, MARY, I.H.M. SISTER. *Mosaics for Everyone.* Los Angeles: Brown Letter Shop, 1958.

Written in a truly creative spirit.

MATTIL, EDWARD L. *Meaning in Crafts.* Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1959.

Provides a good background for craft experiences.

RANDALL and HAINS. *Bulletin Boards and Display.* Worcester, Mass.: Davis Publications, 1961.

A useful school reference.

ROTTGER, ERNST. *Creative Paper Design.* New York: Reinhold Publishing Co., 1961.

—*Creative Clay Design.* New York: Reinhold Publishing Co., 1963.

—*Creative Wood Design.* New York: Reinhold Publishing Co., 1963.

ROTTGER, ERNST and KLANTE, DIETER. *Creative Drawing.* New York: Reinhold Publishing Co., 1964.

This series is highly recommended.

Appreciation for Children

CHANDLER, ANN C. *Story Lives of Master Artists.* New York: J. B. Lippincott Co., 1953.

For upper-grade children.

CHASE, ALICE ELIZABETH. *Famous Paintings.* New York: Platt and Munk Co., Inc., 1961.

Suitable for fifth- and sixth-grade children.

GLUBOK, SHIRLEY. *The Art of Ancient Egypt.* New York: Athenium, 1962.

—*The Art of Ancient Greece.* New York: Athenium, 1963.

—*The Art of Lands in the Bible.* New York: Athenium, 1963.

—*The Art of the North American Indian.* New York: Harper & Rowe, 1964.

This series has potential interest for children.

GOMBRICH, E. H. *The Story of Art.* New York: Phaidon Publishers, Inc., 1958.

Suitable for older children.

HOLME, BRYAN. *Pictures to Live With.* New York: Viking (Studio) 1959.

Containing a wide range of illustrations.

HELLYER, V. M. and HUEY, E. G. *Child's History of Art.* New York: Appleton-Century-Crofts, 1951.

A study of painting, sculpture, and architecture in historical sequence.

HOLME, GEOFFRY. *The Children's Art Book.* New York: Studio Books, 1954.

Children will enjoy this book.

JANSON, HORST W. and JANSON, DORA. *Story of Painting for Young People.* New York: Harry Abrams, Inc., 1952.

Suitable for advanced readers.

MOORE, LAMONT. *The First Book of Paintings.* New York: Franklin Watts, Inc., 1960.

Suitable for upper-grade children.

PRICE, CHRISTINE. *Made in the Middle Ages.* New York: E. P. Dutton & Company, 1961.

Suitable for upper grade children.

RILEY, OLIVE L. *Your Art Heritage.* New York: McGraw-Hill, Inc., 1963 (second edition).

For picture study.

Art Museums

The City of New York is particularly rich in art resources and museums. Outstanding among such resources are: Brooklyn Museum, The Cloisters, Cooper Union Museum, Gallery of Modern Art, Guggenheim Museum, Metropolitan Museum of Art, Museum of Modern Art, Museum of the City of New York, Whitney Museum. In addition, many organizations and institutions display pictures and other materials suitable for various pupil growth levels. Special trips can be arranged for groups of teachers and pupils. A detailed guide to the use of community resources may be found in the Board of Education publication, *A Guide to Some Educational Resources in the City of New York, 1963.*

Notes